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Summer Consumer Electronics Show Report

Indepth report on the Summer 1989 CES show in Chicago, including a list of new game titles being released for the ST

Turbo-Info

First in a series of articles from Chuck Steinman of DataQue explaining the ins and outs of the Turbo-816 hardware/firmware Atari 8bit upgrade

Epson Emulator for Atari Laser Printer

An overseas user's look at the recently released Epson FX-80 emulator for the Atari Laser

A New Shareware Program from Bob Puff

A review of the new terminal program BobTerm for the Atari 8bit

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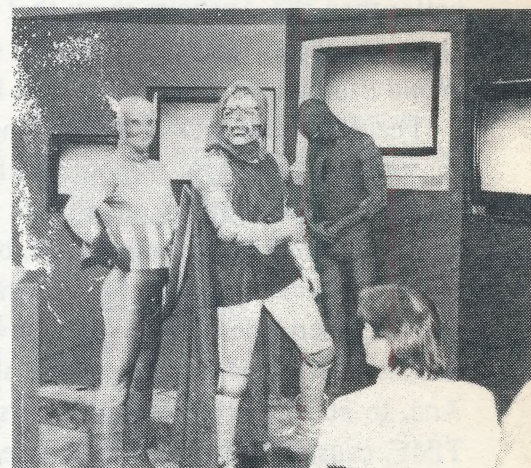
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Atari Klosks at CES



SuperHeroes Promote Games

On the Cover

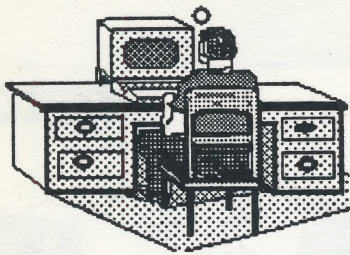
Atari's CES booth and Pam Barnard showing off the new Atari Game Machine.

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Editorial Ramblings

Well, the Dearborn World of Atari (WOA) show has come and gone. Overall, the show was a fair AtariFest, but well below the expectations of many show attendees, exhibitors and probably even of ST World.

Previous press releases and announcements online on GENie and in the online magazines claimed that Atari would be there in force, with 10 to 15 representatives. In fact, only a handful of Atari people were there.

A number of the most important exhibitors that were scheduled to appear didn't show, including Avant Garde, Timeworks and Antic/STart.

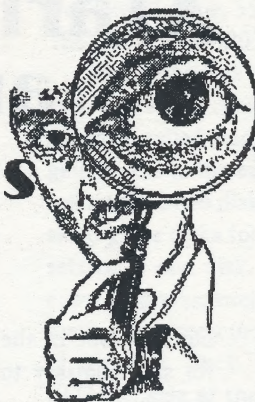
Previous to the show, it had been reported that the Dearborn WOA show was going to be bigger and better than the Anaheim show that took place in April. The projected attendance was around 6,000 for the Dearborn show. Unfortunately, the show fell short on both of these. The official attendance according to ST World is 3,100, while other sources have placed the figure at closer to between 1,500 and 2,000.

The near total lack of advertising in Detroit and surrounding areas is probably the single most important contributor to the low turnout. With only two weeks to the show, a local club officer involved in the show discovered that nothing at all had been sent to area user groups to promote the show. He took it upon himself to send flyers to the clubs, but it was probably just too little, too late.

The seminar schedule for the show was, in a word, dismal (not that the seminars that were scheduled weren't good ones). With only seven seminars on Saturday (one of which was cancelled because Tom Harker of ICD didn't come to the show) and three scheduled on Sunday, there wasn't much to choose from. And, to make matters worse, four seminars on Saturday and two on Sunday were scheduled at the SAME TIME, causing showgoers to choose between them.

Comparing this professionally produced show to the many user group sponsored shows, the Dearborn WOA show was a definite letdown. The August 1987 Detroit Magic show sponsored by MAGIC, GLASS and GAG and the AtariFest produced by the Toronto Atari Federation in November 1988 were far more enjoyable.

The show was definitely not a total failure, and a number of the exhibitors were showing some very interesting products. We will have a full report on the show, with photos, in the next issue of Atari Interface Magazine.



From the Reader's Viewpoint

Dear Fellow 8bit Atari Users,

We are trying to accumulate information on several subjects. We are trying to get hard facts and not rumors or speculation. We would appreciate it if you would communicate with us on any or all of the following subjects giving as much factual information as you can. Anything we find out will be made available to all who cooperate with this effort.

First Subject: XEP80

With the large number of public domain programs such as Speed Script or Text Pro and the several individuals who understand and program with Machine Language, has anyone adapted any applications to 80 column? Most XEP80 users have the relocated handler which allows them to use the excellent BasicXE program language. Has anyone figured out how to use the alledged features of XEP80 like Double High, Double Wide, and Underline? Has anyone figured out a way to display Print Shop icons in 80 column?

Second Subject: Memory Upgrades

Many of us have Newell or Rambo 256K upgrades in our 800XLs. How much larger can we go and, most importantly, how? Information on how to perform upgrades on other 8bits is also welcome.

Third Subject: Hardware Improvements

With IBMs, all a person has to do is plug in a board to have speech to use in their programs. With Atari, we have only a couple of after-market speech devices. When calling these manufactureres, we find that they make the products but that the people who designed them have moved on. Does anyone know of a hardware speech device which recognizes Atascii or Ascii (not numerical code) and works with a handler (or at least uses a handler that doesn't conflict with the XEP80's)?

Does anyone have any plans to hardwire the CX85 Keypad? How about a handler that doesn't conflict with the XEP80? What about any other useful devices?

Fourth Subject: Modifications to the OS

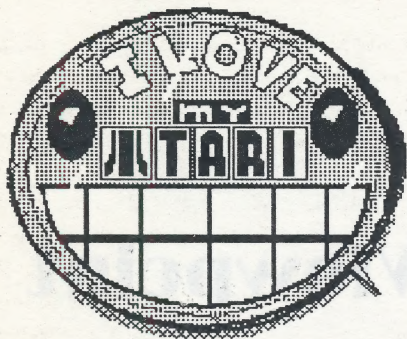
There are several members of the local Atari club who have done modifications to the OS. The modifications performed include providing a cold start and redefining the arrow keys to work without the control key. We would like to know about reversing the Option key and using the Help key in place of Control-I. Any other things that programmers have found useful would be greatly appreciated.

Fifth Subject: Parallel Buses

We are wondering if anyone has experimented with the Parallel Bus for attaching custom designed hardware pieces or reattaching current hardware. We are considering the possibility of designing a type of CPU box containing expanded memory, speech device, modem, drives, XEP80, etc., all addressed through the Bus.

Sincerely yours,
Ron Hoffman
FACCS
W. 2712 Wabash
Spokane, WA 99205

Ron, we've printed your letter in the hope that some of our local 8bit hardware gurus will either contact you directly or write up an article or two detailing some of the projects you're interested in and submit it to AIM. So, what do you 8bit hardware hackers have to help Ron out?



Atari News and Comment

by Bill and Pattie Rayl

At Atari Corporation

There have been several noteworthy events in the last month at Atari Corp. Atari executives have hired Chris Roberts, former officer of a Pasadena user group, to be the User Group Coordinator and official show presence for Atari.

Roberts seems enthusiastic towards his job and Atari when we spoke to him at the World of Atari Dearborn Show, but his style of approach left a sour taste in at least one developer's mouth.

Summer CES

Atari was also busy at the recent Summer Consumer Electronics Show at the McCormick Place in Chicago, IL. Atari had the usual display of 8bit game systems and the older 2600/7800 line, plus a small ST demonstration area.

The main focus of CES for Atari was the introduction of their hand-held game system, called the PCES or Personal Color Entertainment System, to compete directly with the Gameboy from Nintendo. The retail price for the Atari system is proposed at \$150 while the Nintendo is suggested at close to \$80. See the article covering CES later in this issue.

On the American Stock Exchange, Atari stock has been steadily climbing for the past month, hitting a high of \$9 per share near the end of June. That's quite a comeback from the near \$4 per share of just a few months ago.

Software from Atari

New software from Atari was on display at the World of Atari Show recently,

but only one of the two packages were for sale contrary to statements prior to the show.

The new software was an 8bit version of MIDI Maze and Word Flair, an integrated spreadsheet, word processor and database program for the ST. MIDI Maze was for sale, but no information was available on price, availability or release date on Word Flair. AtariWriter 80 was also running at the Atari booth, with complete packaging and documentation.

Atari Release Dates

This is also the end of the second quarter of 1989, and we haven't seen the hardware that, in December of last year, Atari promised would hit the market in the first or second quarter of 1989.

In a CompuServe conference late last year, Sam Tramiel said the Stacey would be on dealers' shelves worldwide by this time of year. He also indicated the ST Game System, designed to compete with Sega's Genesis, and Atari's TT should also be available by the second quarter's end.

OnLine News

Formal conferences on the three major online services have been noteworthy as well. Spectrum Holobyte's President Gillman Louie made the conference circuit this month with stops at GENie, Delphi and CompuServe. The CodeHeads, otherwise known as Charles F. Johnson and John Eidsvoog, also appeared in formal conferences on Delphi and GENie.

Other online news came from PC Pursuit this month. June 30th marks the end of the flat rate charge PC Pursuit/

Telenet built their reputation and popularity on. Now, PC Pursuit is charging \$30 per month for ONLY 30 hours of time, including time you may be receiving a busy signal from their ports. If you go over the 30 hour limit, you will be charged a \$3 per hour fee. There is a family rate of \$50 for 60 hours usage. You are still charged the \$3 per hour fee for any hours above the 60 limit.

More Atari Casualties

At least one Atari developer and several Atari dealers have gone out of business in the past month. Astra Systems was based in Santa Ana, California and was well known for making heavy-duty hard drives. Lou Schwing was famous at Atari shows for holding one of his drives a foot or so above the table and dropping the drive in the midst of loading picture files. Lou may not drop out of the Atari scene because he is reported to be talking to Avant Garde about being their West Coast distributor.

Computer Cache in Massachusetts and Springfield Home Computer in Ohio are two dealerships who also recently closed their doors. They join a growing list of Atari supporting dealers that have called it quits, like United Computer in Michigan, Applied Computer Associates in Virginia and CompuClub in Massachusetts. No information was available at this time to explain why either store closed, but other stores have sited Atari's lack of communication and support to dealers as well as lack of Atari stock to sell as major contributing factors.

Diamond Update

On the software front, Reeve Soft-

ware, recently split from a marketing arrangement with USA Media, is selling the Diamond GOS cartridge and a number of windowing applications packages.

Diamond Paint, a powerful paint program that allows use of various fonts, importing of pictures of various formats (including Atari ST D.E.G.A.S. pictures), and easy drawing of lines, circles, boxes, etc.

Diamond Write, a word processor with spelling dictionary, boasts such features as 80 column output WITHOUT the need for any hardware enhancements, XEP80 support for even better quality display, multiple fonts and text styles.

The Diamond Publish object oriented desktop publishing package allows for creation of multiple page documents containing text and graphics.

All these applications use the windows, pulldown menus and other graphic operating features similar to those found on the Atari ST. List price for each of these packages is \$29.95. Diamond GOS Disk version (\$29.95) or cartridge (\$79.95) required. Versions of these programs for the Diamond Cartridge have additional features not available in the versions for the disk-based Diamond GOS. Contact Reeve Software, 29W150 Old Farm Lane, Warrenville, IL 60555, (312) 393-2317 for more details.

Other New Software

Antic Software/Terrific Software, a surprising no-show at the Dearborn World of Atari show, has recently announced the availability of the STOS Compiler for the Atari ST. A much requested companion to the popular STOS Basic package designed for writing games, the compiler converts Basic commands at a rate of more than 500 instructions per second. Finally, STOS programmers can bring their programs to the general public. The STOS Compiler is attractively priced at only \$34.95.

Also from Antic Software comes Cyber Print and the Interiors Design Disk, the two newest additions to the Cyber family of CAD products. Cyber Print allows you to use your ST and an inexpensive Okimate 20 printer to produce "the best full color printing combination available for under \$5,000," according to Charles Cherry, Antic Software Product Manager. Cyber Print retails for \$49.95. The Interiors Design Disk is a library of furniture and appliances, including complete models, component parts, detailed blueprints and tips on interior designing. List price is \$34.95. For more information, contact Antic Software, 544 Second Street, San Francisco, CA 94107, (415) 957-0886.

For those ST owners who are always too busy playing with their machines to remember birthdays and other holidays, Blue Turtle Software has released Today/ST. Today/ST features a 5,000+ database of famous events and important dates and allows the user to add his/her own items to the list. When booting up the computer, the program automatically displays any urgently important dates, accompanied by a beep, followed by any other "trivial" information available concerning that day. The software comes with an editor for adding, deleting or modi-

fying items in the database and the package retails for only \$14.95 U.S. and \$19.95 Canadian. Contact Blue Turtle Software, c/o Peter Ritchie, 55 Jackson Ct., Kanata, Ontario, Canada K2K 1B6, (613) 592-0203.

Alpha Systems of Macedonia, Ohio, has introduced two new and innovative products to the ST market. A new software package called Back Trak allows double-sided drive owners to gain access to the back side of commercial and even copy protected single-sided disks. This allows use of the back side of single-sided game disks for saved games or even for compiler two-disk sets onto one disk. The program is compatible with available copy programs, such as ProCopy, ST Copy and Copy II ST, allowing two copy protected games to be placed on opposites sides of the disk. Back Trak allows for booting of programs from EITHER side of the disk, and even allows booting your system from drive A or B. With no cables or connectors to get in your way, just 100% software, Back Trak is a breeze to use. All this for only \$29.95!

For the MIDI enthusiasts, Alpha Systems releases Jam Master, a program that turns an inexpensive MIDI keyboard into a full-featured digital sampling synthesizer. Having seen this package at work, we were very impressed. Jam Master turned a low-end Casio into the equivalent of a high end Roland right before our eyes. Jam Master allows full keyboard mapping, letting you assign up to 32 different digitized sounds to your keyboard, a real-time tune-up features, four voice polyphonic sound, and sampling rates up to 40,000 times per second. The program requires a MIDI compatible keyboard and cartridge-based sound digitizer. The program comes with 50 pre-sampled digitized sounds. For more information, contact Alpha Systems, 1012 Skyland Drive, Macedonia, OH 44056, (216) 467-5665.

If you're an ST owner that has been looking for a relatively inexpensive way to back up the precious data on your hard drive (and you have a VCR), Seymor/Radix has just the product you need. DVT is a hardware VCR hard drive backup system for only \$249.95. The hardware plugs into the ST's cartridge port and uses standard RCA cables to connect to the VCR, allowing you to store up to 360 megabytes onto a standard VCR tape at the rate of 8 megabits per minute. Contact Seymor/Radix Inc., P.O. Box 166055, Irving, TX 75016, (214) 823-5797.

And, last but not least, the CodeHeads have done it again with CodeHead Utilities. This package of useful desk accessories and programs include such things as a multi-featured, GEM-based file handling and manipulation program; an organizer of files in your AUTO folder; configurable ramdisk that does not do a double reset on bootup; a graphics viewer/slideshow program with some very nice features; a program that allows replacement of the system font with customized fonts and the ability to print these fonts to Epson compatible printers; a user configurable print spooler that even puts Alt-Help screen dumps into the print buffer; and much, much more! All this for only \$29.95. For more information, contact CodeHead Software, P.O. Box 74090, Los Angeles, CA 90004, (213) 386-5765.

Turbo-Info # 1

An Introduction to the Turbo-816

by Chuck Steinman (DataQue)

Welcome to the introductory article in a series which will present the Turbo-816 from DataQue Software.

Initially, the features of the product will be presented, and later the series will progress to actual applications and programming hints. If you have any comments or criticisms, I would appreciate it greatly if you would write a note to the editor of this fine magazine and express your thoughts.

For those of you not familiar with the Turbo-816, it is a hardware and firmware upgrade for the Atari XL and XE computers that expands the capability of those machines, while still maintaining compatibility with your existing software and hardware investment. There will also be a version for the original 800, although no release date has been set at this time. The XL/XE kit is called the Turbo-816x, and will sell for \$120 plus \$4.00 S&H within the US. Foreign destinations, COD and other special handling would be extra.

The main component of the T816 (short for Turbo-816) is the CPU adapter board. For those of you unfamiliar with computer jargon, CPU stands for Central Processing Unit, which is the main "brain" of your computer. The CPU that came in your XL/XE computer is an 8bit 6502. The actual CPU in the Atari XL/XE computers is a slightly modified version of the 6502.

The T816 adapter board, along with a short ribbon cable, replaces your existing 6502 CPU with a new, more powerful 16bit CPU. This new CPU has the

unique capability of also being able to understand the 8bit 6502 CPU instructions. That allows the adapter board to still execute your original 8bit programs.

The CPU adapter board is approximately 5 inches by 2-1/2 inches, and it takes care of all timing and control functions, allowing it to fully emulate (or function like) the special Atari version of the 6502 while also extending the addressing range. One jumper must be added to your Atari XL/XE motherboard to make the system work. Installation and modification information is provided as part of the Turbo-816 kit.

The other component of the Turbo-816 system is the Turbo-OS ROM. This part is a 28-pin integrated chip that holds the initialization and control software that most users take for granted. Originally, I had planned on this chip fully replacing the Atari OS and just adding any new functions required by the new CPU to allow it to work properly.

It wasn't long before I ran into a snag. Atari would not release the source code for the XL/XE Operating System ROM to me. I offered to sign any non-disclosures and pay any required fees, but the best offer they could come up with was \$1000 up front, and 50 cents per unit sold, for the right to copy only certain sections of the Atari Operating System ROM, but no source code was to be included in that agreement.

I was not impressed with their support, so I proceeded to write the entire Turbo-OS from scratch. This not only cost several additional months of programming effort, but also increased the amount of time to test each and every function. The resulting Operating System is 100% compatible with software that

uses the published, legal entry points into the Atari OS and legal RAM locations. Because of many programs making illegal calls to the OS or using reserved RAM, I suggest that BOTH the Atari OS and the Turbo-OS be installed in your machine and a toggle switch be used to select which is active. Details on how to make this modification are also included in the kit.

A popular misconception about the upgrade is that it will execute ST and/or IBM/PC programs. It will not.

I have never advertised or claimed it would, so I can only guess someone that was not familiar with assembly code, or the internal workings of computers, started this rumor.

The ST uses a 68000 processor, and the IBM uses an 80x86-based processor. The 65816 is not software compatible with either of those CPUs, and neither of those CPUs can directly understand 6502 code. If someone wants to write such an emulator for either of those CPUs, let me know when you have it done!

The Turbo-816 uses the WD65C816P5 CPU, which was designed by Western Design Center and is manufactured by California Microsystems. This is the same CPU used in the Apple IIgs. Anyone familiar with the IIgs knows it is a powerful little machine, although it does have a few design problems that prevent it from being able to fully take advantage of the CPU.

Many Atari owners have asked me, "What will this do for me?" There are many ways to answer that question depending on what you use your computer for and whether you program. The Turbo-816 not only adds 16bit working registers, but also new, more powerful in-

structions and a 24bit address bus. Now with these new capabilities, more powerful new programs can be written to allow the Atari computers to compete again with the more expensive 16bit computers. The new addressing capability allows for up to 16 megabyte of memory (RAM), and the new instructions make smaller, faster, and more complex routines possible.

I have made MAC/65 Macros and other information available to all registered owners via my BBS and the GENie telecommunications service, allowing owners of MAC/65, or any other macro assembler, to begin using the new 65816 instructions immediately.

To the non-programmer, at this time there are no programs which take full advantage of the Turbo-816. Current applications will run from 5% to over 300% faster depending on how much they use the Turbo-OS. Since existing software was not written to access the new memory or take advantage of the new instructions, that software can only gain performance by calls to the Turbo-OS.

I will have several new applications which will take advantage of the new memory and power, though. The first of these will be a spreadsheet program called the Turbo-S16. It will be similar to VisiCalc and SynCalc. The program will determine if a Turbo-816 and Turbo-OS are available, and then use any expanded or explicit memory, if available. Otherwise, it will run on

a stock Atari 400/800/XL/XE using the normal RAM. Since it is not initially going to be designed as a concurrent application (i.e., it will not multi-task), the program will absorb all available RAM for its use.

That means, if there is one megabyte of explicit or expanded memory available, the program will allow you to use up to that amount for the application. I plan on releasing this program in ROM, which will be, to my knowledge, the first spreadsheet program to be implemented in ROM for the Atari. A discount will be available (with proof of purchase) to owners of SynCalc, SynCalc+ and VisiCalc as an incentive to upgrade to the Turbo-S16. Details will be released later.

Another application nearing completion is the Turbo-A16. This is an assembler that will allow you to assemble native mode 65816 code. I am trying to incorporate enough versatility to allow loading of source code from popular file formats. That will allow people to use their existing libraries without first having to convert them. It has not been decided whether this application will be in ROM or disk based.

That's the basics of the Turbo-816. If you have any specific questions you would like answered, please forward them to the Editor of AIM, and I will see that you get an answer. For those of you with GENie accounts, I have a special section dedicated for Turbo-816 questions and answers, so feel free to drop in!

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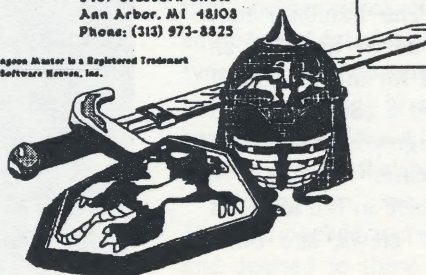
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Summer CES 1989

by Jim Kennedy (MACE)

What do the following have in common? Chicago, IL; over 735,000 sq. ft.; 13 miles of isles; more than 70,000 visitors; and 1,400+ exhibitors. Why the 1989 Summer International Consumer Electronics Show (CES), of course!

This was my first chance to get to one, and I can say that I had a GREAT TIME! I was exhausted by the time I got home, but boy, what a way to spend a vacation!

The Consumer Electronics Show is held twice a year, in the winter (early January) in Las Vegas, NV, and again in the Summer (early June) in Chicago, IL. The show is designed for manufacturers to show their newest products and buyers to make the deals that will make the products available to the public.

At the show, everyone wears a color-coded name tag, which identifies you as one of the following classifications: Exhibitor, Buyer, Distributor, Manufacturer, Manufacturer's Rep., Advertising/Mktg./P.R., Financial Market Analyst, Editorial Press, Media Representative or Guest.

If you would like more information from an Exhibitor, you simply give them your name tag. It is similar to a credit card, in that it has raised print containing your name, company name, address and your classification. The Exhibitor runs your card through a device that puts an imprint on a request for information. It beats carrying around a couple hundred business cards, although you should have some of those just in case.

The Press was there in full force, as we kept seeing TV crews, and other

members of the Press checking out the latest products to report to the public. This is the capacity in which I went, along with Tom Daugherty, who acted as the AIM Photographer.

The CES Press Room was a real help, as they had booklets to guide us from building to building and Press Kits (which are basically just News Releases, photo's, etc.) explaining the new products from each company. For instance, the Press Kit from Atari includes B&W photos of their new hand-held game machine, and even a set of eight color slides showing the games for it.

I was also surprised at the number of free magazines given away by each publishing company. I found the most recent issue of everything from "Electronic Gaming Monthly," "Omni," and "Video Magazine" to "Penthouse!"

There was more than a little terminology to pick up, such as "platform," which refers to the type of computer (ie. Atari ST, IBM) the software or hardware is being designed for. And when you ask,

"When will it be out?" and they answer "3Q," you have to know that means the Third Quarter (July-September). The term "Affiliated Labels" (AL) refers to smaller companies contracting with larger ones (ie. Electronic Arts, MediaGenic) to distribute and market their products.

The show was held at McCormick Place East (Audio/Video), North (Atari, Nintendo, Sega) and McCormick Center Hotel (High-End Audio/Video). For those who didn't have enough to look at, there were various workshops and special events running throughout the show.

We spent two days just in McCormick North looking for Atari support, checking out the new Sega 16-bit "Genesis" game machine and the massive Nintendo booth. We didn't find any new Atari 8bit products, but that doesn't mean there aren't any. Not all software companies were there and Atari does have a few new games coming out for the XE Game System (XEGS) on cartridge.

There was a good amount of ST support though, with companies from the



United Kingdom (UK) and France (i.e., UBI and Titus) showing their interest. It seems a lot of titles are coming from Europe where the ST is popular.

Companies like Electronic Arts with affiliated labels based in the UK have several tried and proven winning titles coming to the U.S. market. This seemed to be the general consensus: if it works there, bring it here. A couple of American companies (Electronic Arts in-house and Infocom) are releasing little, if any, new software due to piracy. I was very surprised to find that Infocom has no further plans to bring out anything for the ST! I recall Infocom's catalog always brimming with versions for virtually every known computer. This is a real shame, as they have some of the best adventures available.

The Atari Corporation booth covered 2,500 sq. ft., and was located close to the Sega booth which had 9,900 sq. ft. and the giant Nintendo booth with over 50,000 sq. ft. (three football fields). About a quarter of Atari's booth contained five kiosks, each with a different game machine (ie. 2600, 7800, XEGS). Atari didn't announce or show a 16-bit game machine. With Nintendo's 80% share of the American video game market, they have a good reason to think twice. Atari seems to be trying to capitalize on the current surge in video game sales by bringing out new titles for their old game systems.

Atari has also started a "Hints and Tips" type magazine for them, called "Atarian Video Game Magazine," which is very



similar to Nintendo's magazine "Nintendo Power." Atari's press release boasts of the magazine's circulation (110,000), as does Nintendo (1.2 million), but Nintendo had given theirs away free with their units until August of '88 when they renamed it and started charging for it. Both magazines are bi-monthly and both stat's are five months from their debut. Interestingly, the May/June, and August issues both claim to be PREMIER ISSUES.

According to Atari, the XE Light Gun is compatible with the 2600 and 7800 video game systems and software will be coming out for them to support it. Those games include "Barnyard Blaster" and "Sentinel" for the 7800 and a version of "Sentinel" for the 2600, along with one called "Shooting Arcade."

Sixteen other non-gun games for the three game systems to be released by the end of '89 include "Midi Maze" for the XE and "Double Dragon" for both the 2600 & 7800. The Light Gun will retail for \$24.95, while the 2600 games will be \$10-\$18, the 7800 games will sell for \$18-\$35 and the XE cartridges will cost \$20-\$35 each. Meanwhile, the "Atari Advantage" program running across the country is a way to collect free games and prizes.

Consumer Products (read calculators) took another chunk out of the booth. An entire line of calculators, small to business-type, and solar-powered, 19 models in all. For only having 19 models, Atari must have brought along a lot of extras for the amount of space they took up.

Moving on, we found only one 1040ST, hooked to two MIDI keyboards and demoed to those interested. Hardly enough display space for a product that has made them so much money in Europe.

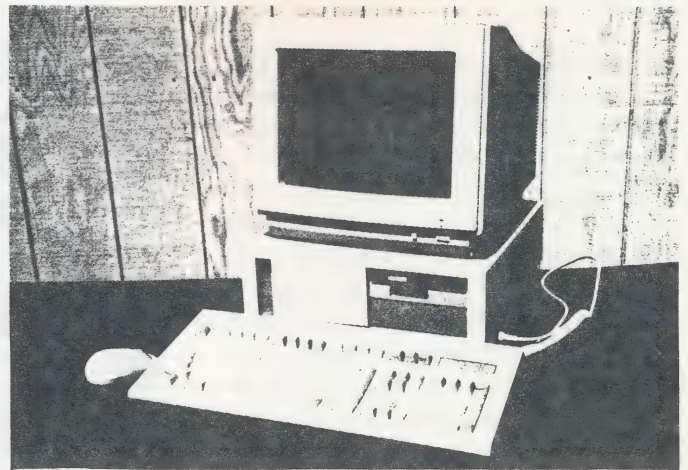




Next to the ST, and on the same desk, there were two identical "ABC 286/30" IBM/AT compatibles. Andy Marken, from Marken Communications, Inc. (Atari's 6-month old PR firm) said that this machine was designed for the U.S. market with its price/performance ratio. The 80386 (not shown) was designed for the European market and is doing well there. He also said that neither machine would cross markets, that is, you won't see the 80386 (PS/2 compatible) in the U.S. and visa versa.

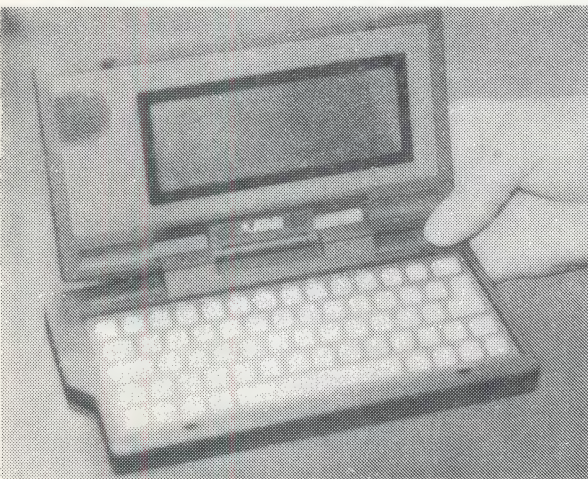
The 286/30 runs at 8 MHz, has 640K RAM, 30 Mb (RLL) hard drive, 3.5" 1.44 Mb disk drive (the one on display had a 720K drive), supports MDA, Hercules, CGA and EGA. One serial port, parallel port and three AT expansion slots are included, with memory expansion to 4 Mb possible. The machine uses the Intel 80286, 68 watt power supply, clock, MS-DOS 3.3, BIOS: AMI, with dimensions of 5.75H x 14W x 16D inches. Atari still holds to their "90-day officially announced, have it in the stores" policy...although on some products, quantities maybe limited, hmmm... They claim 3rd quarter on the ABC 286/30.

You're probably wondering if the "STacy" (portable ST) was

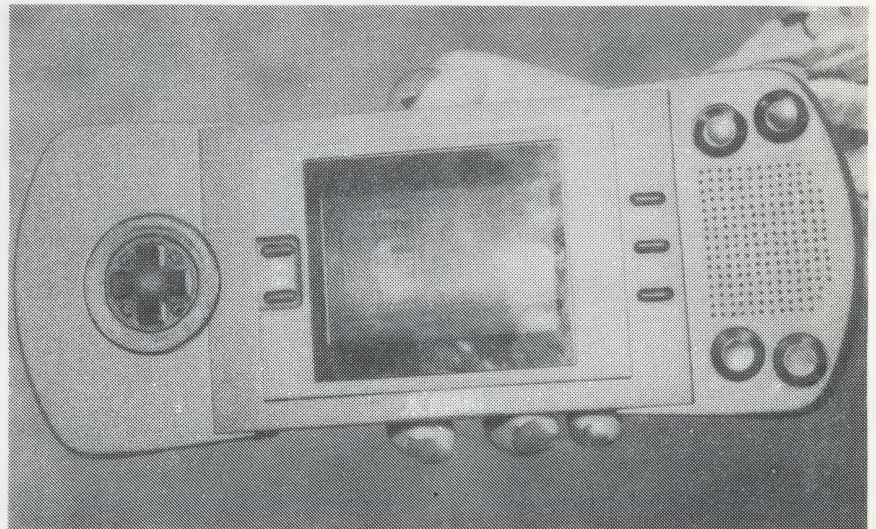


there; well it wasn't. The prices on the "Stacy" were \$1495, or \$1995 with a 20 Mb hard drive. The delay was due to the FCC, but they claim it should be out in August. The "Portfolio" (IBM XT compatible) was at the show, although you did have to ask to see it. As an IBM XT user myself, I was SHOCKED at the small size — about that of a VHS video tape! I don't have a statistics sheet on it, so I can't give you much. It has a price of \$399 and is supposed to be available by the time you read this.

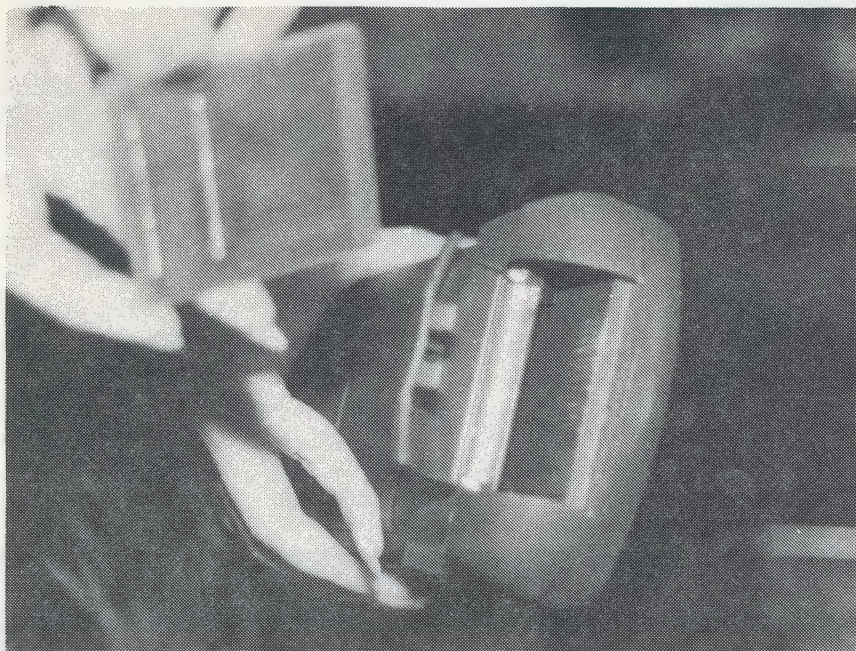
I like to keep the best till last...in a quarter of Atari's booth they were showing the "Atari Portable Color Entertainment System." I've come to learn that this was actually developed by Epyx (what arrangement there is between the two companies, we can only speculate). This unit is also the size of a video tape, with a 3.5" color LCD screen (160 x 102 pixels), with 16 colors out of a palette of 4,096. It zips along at 16 MHz on only 6 "AA" batteries. It doesn't end there, the unit has 4 channel STEREO sound (headphones included), weighs one pound, has 64K, takes game cards that store up to 16 Mb., optional AC adapter, eight-way joypad, two fire buttons and five function



The Portfolio from Atari



The new Game System from Atari



Another view of the new Game System

buttons. Both right-handed and left-handed people can use it, and there is a Comm-Link so you can connect up to 8 other units and play against each other. The unit will retail for under \$150, with six 1 Mb games also available for \$34.99 each and more to follow. I asked if that was the name they were going to stick with (kind of long). Andy replied that they tried to find something else, but settled on the present one. The picture is very good, and I think it is far better than the competition, Nintendo's "Game Boy" (which I'll talk about later). The Atari unit will be available September '89 and will include the "California Games" game card.

One last thing of interest, the founder of Atari, Nolan Bushnell, was at the show. We just missed him, but Andy told us he's currently working with Atari to make new games for the 2600 and 7800 systems. I'm kind of surprised, I would have thought he would be designing stuff for the ST.

There were several software companies there, such as Electronic Arts, MediaGenic (formerly Activision), MicroProse (with a new corporate name of "MPS Technologies" who will also be getting into the coin-op business), Broderbund, Soft-Kat distributor (which had many companies in its booth) and more. I have prepared a list of new software and it is elsewhere in this issue.

I mentioned earlier that several titles were coming from Europe which seems to be a trend, and we came across a couple companies from France. One is called UBI Soft, with titles "Rank Xeros," "Othello," and "Great Courts" coming to the U.S. market. The company was still looking for a U.S. distributor, so I can't tell you when they will be available.

Another company called Titus (20432 Corisco Street, Chatsworth, CA, 91311, (818) 709-3692) have already brought or will be bringing six titles for the ST to the U.S., including "Crazy Cars," "Fire and Forget," "F40 Pursuit," "OffShore Warrior,"

"Galactic Conqueror," "Titan," and "Knight Force." The game "Knight Force" will be out in October '89. The Titus games will retail from \$39.95 to \$44.95 each.

GameTek is releasing "Wheel of Fortune Jr." and "Jeopardy Jr." in the 4th quarter. Spectrum HoloByte has "Flight of the Intruder," a Vietnam simulation with A6's & F4's (jets), also coming in the 4th quarter. A company called Pederson Systems from Europe is releasing "The Rings of Saturn" and Audiogenic Software will be shipping "Lone Wolf," "Wreckers," and "International Soccer" in the 4th quarter. I don't have addresses on these companies, except Spectrum HoloByte which is in the list.

I don't recall seeing anything in the Home/Productivity category or anything else besides games, but that is the flavor of the show. Everyone was pushing their

games (read graphics) for the 3rd and 4th quarters (read Christmas). My advice to ST owners is, "buy it if you use it," otherwise more companies will drop off support for this fine machine. Pirating is everywhere, even in the MS-DOS world, but we have a lot less ST machines out there and when these companies look at the balance sheet and see MS-DOS and Amiga making more money, can you really blame them for leaving ST'ers behind?

Over at the Sega booth, they were proudly displaying their new 16-bit "Genesis" game machine (called the "MegaDrive" in Japan). Features include 512 colors, stereo sound, 68000 and Z80 CPUs, headphones included, 3-D like perspective, and with



Dr. Doom introduces one of MicroProse's new games.



the "Power Base Converter," Sega 8-bit Master System cartridges (over 80) become usable on the new system. The unit will be available in Fall of '89 at a estimated price of between \$179 and \$199, with games from \$40-\$60.

Screen resolution for the Genesis is 320 x 224, as compared to a recently announced NEC 16-bit "TurboGrafx 16" game machine with the same resolution, while Nintendo's 8-bit (6502 cpu) NES system has only 256 x 240 with 52 colors. NEC's machine also has 512 colors, and although NEC was at CES in mobile communications, we couldn't find their video booth. The NEC is supposed to be using a Hu6502 cpu for its show and go.

Sega also announced the "TeleGenesis" system, which is basically a modem that players will be able to connect to their units, and up to two players can play head-to-head games over the phone lines. Although this isn't news to us computer users (we've been doing it for years), it is the first time it has ever been

offered to dedicated game machines. It should be interesting, as Sega is playing with the idea (in Japan) of such services as home banking, electronic mail, home shopping, etc. Special TeleGenesis games are required to use the modem, and you can have a different perspective on both Genesis units. The release date is slated for late '89 (4th quarter).

Sega also had plenty of Genesis and Master Systems available with the newest games for play.

It's interesting to note that the old Atari 2600 has a 4-bit CPU, which I believe had only 4K of RAM internal. Look how far we've come!

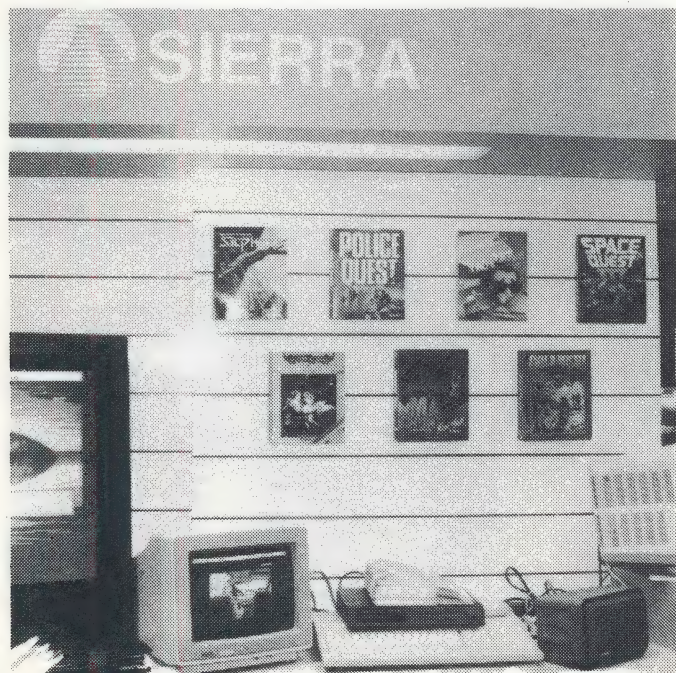
Across the isle from Sega was the massive Nintendo booth. It was so large in fact, they gave us a map to find all the licensees (vendors) and new products on display. Needless to say, there was a lot of activity in this booth.



In the past, if you wanted to write a game for a game machine, there wasn't much stopping you. If you want to write one for Nintendo you'd have to get permission and a license from them. You submit your idea to Nintendo for okay, then write the code (program) and send it off to them. They manufacture and market the game, and you receive what they feel is the right quantity to sell. That is why some NES games are so hard to come by, one reason anyways.

So, what's the point of telling you this? Well a company called Tengen (a division of Atari Games) is suing Nintendo for rights to make those games without all of that red tape. They claim Nintendo has a monopoly on the market and filed an anti-trust lawsuit against Nintendo in December of '88. Atari Games/Tengen also reversed engineered the NES cartridges and made their cartridges work on the NES without the special lock-out chip Nintendo uses.

Nintendo responded with its own lawsuit because Atari Games/Tengen violated its licensing agreement, improperly



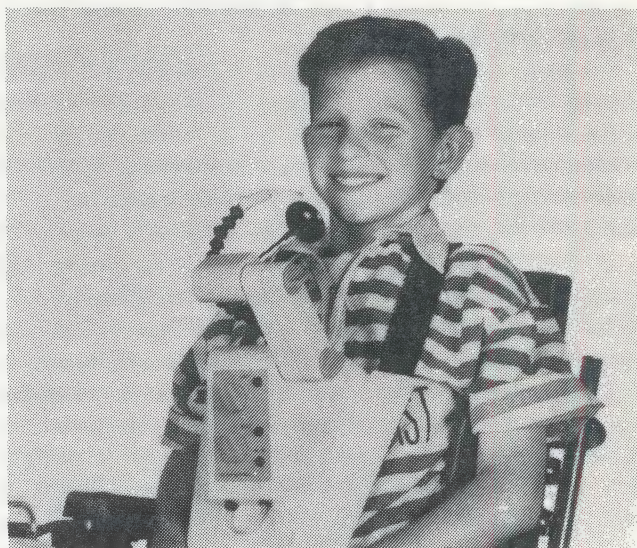
received and used proprietary information, violated trademark laws and is violating the Racketeering and Corrupt Influence Act (RICO) by creating Tengen as a front company in order to defraud Nintendo.

Atari Games Corp. is totally separate from Atari Corporation. Atari Games (if you remember) was kept by Warner Communications when Jack Tramiel first bought Atari (to become Atari Corp.) from them.

You've probably heard of the lawsuit in the news before. I wanted to mention it here because Tengen was only a stone throw from the Nintendo booth. I understand that it is possible to buy Tengen games, and they seem to be going on with the business at hand. The Atari lawsuit goes to court in late '89. There has been much press on this issue, and you might want to see "Computer Shopper" (May '89, p.181) for Stan Veit's Editorial.

Nintendo was showing off its new "Game Boy," a hand-held game computer not unlike Atari's unit. Nintendo's is 3.5" x 5.75" inches, weighs 10.6 ounces, has an 8bit cpu, 52 color LCD 2.5" display. It has stereo sound, uses cartridges (made for it), battery powered or AC adapter (optional), and will retail for \$89.95 and be on sale August 1, 1989. Software will go for \$19.95 each, and "Tetris" will be included with the Game Boy.

The Game Boy unit was the size of a paperback book, with a green/white display. The graphics were good, but I honestly think the Atari color unit is better. If you saw both units, you'd see a lot of similarity, such as the joypad, stereo sound, Comm-



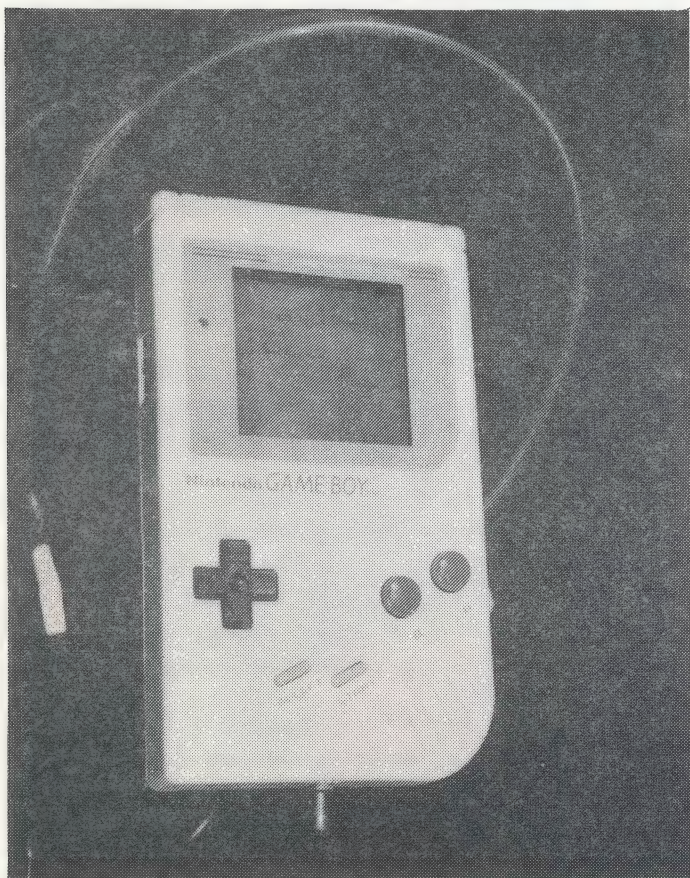
Link/Video-Link, etc. Nintendo's unit only allows play between two Game Boys with their Video-Link.

Aside from the Game Boy, Nintendo also showed the "Hands-Free" controller for physically disabled people to allow them to play NES video games. The unit uses a "sip and puff" tube to simulate the joystick or controller. The controller weighs 2.5 pounds, is worn on the chest and is available from Nintendo for \$120. Another new product was the Nintendo "NES Satellite" which allows players to connect up to four different controllers, while being separated from the Control Deck (infra-red) up to 20 feet away. It also allows four people to play a game, provided the game allows it.

Nintendo was also showing "Tetris" for the NES game system, as was Tengen!

All of the vendors in the Nintendo booth had new games to show, and the controllers "U-Force" (Broderbund) and "Power Glove" (Mattel) were demoed. The "Power Glove" is a glove with three ultra-sonic devices around the TV which allow the player to move her arm/hand and control objects on the screen. Very impressive! It will be available Fall '89 in two sizes. The "U-Force" is two sections of black plastic, and you move your hands over its surface and it controls movement on-screen. Probably the best example of this is the boxing game "Punchout," where the player can use the U-Force controller to actually throw real punches and knock out the opponent on-screen! Both units debuted at the Winter '89 CES. "U-Force" will be available this summer for \$69.95.

In the interesting products category, we came across the "Battletech Center." Think of it as a sit-down arcade machine, with a hatch that closes. There will be two sets of 8 units in a "Battletech Center," with one set of 8 split into two teams (four units each). One person per unit, with an intercomm for team members. There will be different games available to play, but basically you will be on a team trying to find and destroy members of the other team. The cockpit has several LED displays,



two monitors, two joystick type controllers, one lever type for speed, and foot pedals for steering.

The game in use at CES had players fighting each other in giant robot-like vehicles. Each cockpit contains three proprietary computers with a total of 32 Mb RAM, which communicate with the other cockpits via a Local Area Network (LAN). The main viewscreen can display 200 3-D objects in real time, with a maximum of 64,000 colors on screen at any time. It uses a 34010 cpu at 40 MHz, with a 320 x 200 screen resolution, system RAM expandable to 130.5 Mb for the Graphics System (Primary).

Environmental Simulations Project (ESP) is the company responsible for the Battletech Center. Interested in opening one up? You'll need a 5,000 sq. ft. building and some start up capital — only \$750,000. ESP plans to develop 150 centers across the U.S. and Canada, with the first opening in Chicago at the end of '89. Contact: ESP Corp., 1026 W. Van Buren, Chicago, IL, 60607, (312) 243-4746. One more thing, "Battletech" the game is being made available on select personal computers, with additional modules also available. Being that Infocom is the company developing this version for home use, it won't be available on the ST. MediaGenic owns Infocom, so if you want to see this game on the ST, write to them at 3885 Bohannon Drive, Menlo Park, CA, 94025, (415) 329-0800.



Other interesting products include Cannon's "Xapshot," a camera that takes up to 50 still pictures and stores them on a two-inch disk (looks like a small 3.5" inch computer disk). Then, you can just plug the camera into the TV set and view the pictures. The unit has a CCD pick-up element (vs. a tube), RGB output, built-in flash, weighs 0.93 pounds, and more...for only \$999. [Canon U.S.A., Inc., One Canon Plaza, Lake Success, NY, 11042]

Then, there was Hill Audio Products with "The Landscape Speaker," a loudspeaker you bury in your backyard! At \$199 (8" model), you probably don't want to bury too many, but if you're having an outdoor party, this may make all the difference in outdoor music. Actually, the top of the unit is left uncovered, so music (or whatever) radiates up and around. [Hill Audio Products, Inc., 510 Charlotte Street, Longwood, FL, 32750-6370, (407) 339-890]

A device called "Current Deterrent" was shown by Mara-Dar Enterprises, Incorporated. You plug your TV or other electrical device into this little gem, and if the kids are watching too much TV, just turn the key to "off" and off goes the TV! It's like having a padlock on the TV, video games, etc. Better make sure your spouse doesn't have the key when your favorite TV show is on though! No price on this one. [Mara-Dar, P.O. Box C-12339 #435, Scottsdale, AZ, 85267, (800) 344-3599]

There were many other products and things to see, but I need to wrap this up. As far as Atari Corp. goes, I liked the Portfolio and hope it makes it to market. It's a nice little machine for \$399. I've seen interest in at least one magazine (PC Resource, June '89), although a company called Poqet Computer is supposed to be bringing out their own small laptop, so we'll see. The STacy sounds good, kind of expensive, but if they wait too long we'll all be using 32-bit machines.

The Atari Portable Color Entertainment System needs a much shorter name...how about a contest to find one? It's a great little unit and IF they support it, it should be a really great unit. They will need to be in the mass merchandiser's hands before Christmas (before Game Boy) with software available too. Otherwise, they can kiss it goodbye.

Nintendo's Game Boy isn't cheap either at \$90, and Nintendo will sell more of them than Atari will sell its system, but I believe Atari's is better. That doesn't mean Atari will win, look at the Sega 8-bit Master System. There are many who believe it is the better system, but the Nintendo NES has won hands down. It will be interesting to see Sega's Genesis system make it; I think this puts Atari's ideas of a 16-bit game system in serious doubt. If NEC brings one out and Nintendo announces one next year, Atari would have to get on the ball with production and software for one (would it use a disk drive or cartridges?). This is not Atari's greatest ability.

I guess you've seen my skepticism sneak in, but I've been an Atarian for many years and have heard a lot of empty promises from my favorite computer company. Come on Atari, I'm not from Missouri, but I want you to "show me!"

New Atari ST Software

compiled by Jim Kennedy (MACE)

The following list of software has been compiled from news releases of the numerous software companies present at the 1989 Summer International Consumer Electronics Show (CES), held in Chicago, IL. Some smaller software companies have their software distributed by a larger company (ie. Mediagenic) so these will be listed under COMPANY as "distributor/smaller company". They may be known as Affiliated Labels (AL), Electronic Arts has several AL's.

Under the SHIP DATE column, "NOW" means it should be in the stores by the time you read this! All SHIP DATES are for 1989, unless otherwise noted. "3Q" (third quarter), "4Q" (fourth quarter) means delivery will be sometime in (July, August, September) and (October, November, December), respectively. Under the PRICE (Manufactures Suggested Retail Price) column, several companies had not set prices yet, if interested, check with your dealer or call/write the company. Every effort was made to show the correct information on each item.

COMPANY	TITLE OF SOFTWARE	SHIP DATE	PRICE	CATEGORY
Avalon Hill	Rise/Decline THIRD REICH	?	?	Strategy
	WW II Wipeout	?	?	Strategy
Broderbund/Domark	Licence to Kill	Fall	34.95	Action/Arcade
Broderbund/LucasFilm	Star Wars	?	39.95	Action/Arcade
Broderbund	Shufflepuck Cafe	NOW	39.95?	Action/Arcade
Broderbund (U.K.)	Joan of Arc	3Q	?	War simulation
Broderbund/Origin	Knights of Legend	1/90	49.95?	Fantasy RolePlay
	Omega	Aug	49.95	Strategic Design
	Space Rogue	1Q90	49.95	Space/RolePlay
	Times of Lore	NOW	39.95	Action/RolePlay
	Ultima V: Warriors/Destiny	NOW	59.95	Fantasy/RolePlay
	Windwalker	1Q90	39.95	Fantasy/RolePlay
Capcom	Last Duel	Aug	?	Space
	Side Arms	Aug	?	Space Adventure
	LED Storm	Aug	?	Racing
	Black Tiger	4Q	?	Fantasy Epic
	Forgotten Worlds	4Q	?	Space Adventure
	Strider	4Q	?	Swordsman Adv.
Data East/Ocean	Robocop	NOW	39.95	Action/Adventure
	Batman, Caped Crusader	NOW	39.95	Action/Adventure
	Vigilante	NOW	39.95	Action/Arcade
Data East/Sega	Super Hang On	NOW	39.95	Motorcycle Race
	Bad Dudes	NOW	39.95	Street Fighting
Electronic Arts (EA)	F-16 Combat Pilot	?	?	Air Combat Sim.
EA/U.K. division	Populous	?	?	Action/Adventure
	Powerdrome	?	?	Space
EA/Arcadia	Artura	June	39.99	?
EA/Interstel	Dragon Force	July	44.95	?
EA/LucasFilm Games	Indiana Jones/Last Crusade	Sept	49.95	Graphic Adventure
	Indiana Jones/Last Crusade	June	39.95	Action
	Loom	Oct	59.95	Fantasy Adventure
	Their Finest Hour	Oct	59.95	Air Combat Sim.
EA/Datasoft	The Android Decision	June	?	?
	Rubicon Alliance	July	?	?
EA/S.S.I.	Red Lighting	June	?	?
	Star Command	June	?	?

CONTINUED ON NEXT PAGE

COMPANY	TITLE OF SOFTWARE	SHIP DATE	PRICE	CATEGORY
EPYX	Axe of Rage	NOW	49.95	Action/Strategy
	Devon Aire...Diamond Cap.	NOW	49.95	Discovery
	Project Neptune	3Q	34-39?	Adventure
	World Championship Karate	NOW	19.95	Karate (re-release)
IntraCorp/Capstone	Miami Vice	July	39.95	Action/Arcade
	Trump Castle (Casino)	NOW	39.95	Casino Simulation
IntraCorp/First Star	Superman: The Man of Steel	July	39.95	Action/Arcade
MPS (MicroProse)	Pirates	3Q	44.95	RolePlaying/Adv.
	Sword of the Samurai	?	?	RolePlaying/Adv.
MPS/Medalist	3-D Pool	July	?	Billiards
	RVF Honda	July	?	Motorcycle Race
	Savage	July	?	Fantasy Adventure
	Stunt Car Racer	Sept	?	Racing Car
	Weird Dreams	Aug	?	UNIQUE!
	Xenophobe	Aug	?	Space/Arcade
MPS/Medalist/Hewson	Eliminator (from U.K.)	June	?	Space Fantasy
	Exolon (from U.K.)	June	?	Space Fantasy
	Netherworld (from U.K.)	June	?	Space Fantasy
	After Burner (Sega)	Oct	49.95	Jet Fighter
Mindscape	Balance of Power: 1990 Edition	June	49.95	Strategy
	The Colony	Fall	49.95	Adventure
	Fiendish Freddy's Big Top	Aug	49.95	Circus
	Gauntlet II	June	49.95	Action/Arcade
	Harley-Davidson: Sturgis	1/90	49.95	Adventure
	Shinobi (Sega)	Sept	49.95	Action/Arcade
	CODENAME: Iceman	Soon	?	Adventure Sim.
	The Colonel's Bequest	Soon	?	3-D Animated Adv.
Sierra-On-Line	Conquests of Camelot	Soon	?	3-D Animated Adv.
	Hero's Quest	Soon	?	Adv./RolePlaying
	Hoyle's Book of Games	Soon	?	Family Classics
	Leisure Suit Larry III	Soon	?	3-D Animated Adv.
	Manhunter San Francisco	Soon	?	Adv./Strategy
	Sorcerian (from Japan)	Soon	?	Action/Role Play
	Vette!	?	49.95	3-D Driving Sim.
	Quadrilien (from Europe)	July	?	Arcade
Spinnaker	Star Goose (from Europe)	July	39.95?	Arcade
TAITO	Arkanoid II: Revenge/Doh	NOW	29.95	Action/Arcade
	Operation Wolf	NOW	29.95	Action/Arcade
	QIX	NOW	29.95	Action/Arcade
	Rambo III	NOW	29.95	Role Playing Adv.
	Rastan	4Q	29.95	Action/Arcade
Top Ten/Mandarin(UK)	Lombard RAC Rally	NOW	39.95	Racing Sim.

SEE NEXT PAGE FOR COMPANY ADDRESSES

The following is a list of addresses for the companies in the "NEW ATARI ST SOFTWARE" listing. When calling/writing these companies, please let them know that you saw them in the Atari Interface Magazine (AIM).

THE AVALON HILL GAME COMPANY

4517 Hartford Road
Baltimore, MD 21214
(800) 638-9292 (Orders only)
(301) 254-9200 (Information)

BRODERBUND SOFTWARE, INC.

17 Paul Drive
San Rafael, CA 94903-2101
(800) 521-6263 (Orders, M-F: 8am-5pm PST)
(415) 492-3200 (Information)

CAPCOM U.S.A., Inc.

3303 Scott Blvd.
Santa Clara, CA 95054
(800) 843-4632 (Information)
(408) 727-0400 (Information)

DATA EAST U.S.A., Inc.

470 Needles Drive
San Jose, CA 95112
(408) 286-7074 (Information)

ELECTRONIC ARTS (E.A.)

1820 Gateway Drive
San Mateo, CA 94404
(800) 245-4525 (Orders, M-F: 8am-5pm PST)
(415) 571-7171 (Information)

LUCASFILM GAMES

P.O. Box 10307
San Rafael, CA 94912
(415) 662-1800 (Information)

ORIGIN SYSTEMS

136 Harvey Road Building B
Londonderry, NH 03053
(800) 999-4939 (Orders, 8am-5pm EST)
(603) 644-3360 (Information)

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Wizball

by Bob Retelle (MACE,WAUG)

Wizball is one of those rare games which combine great graphics and smooth scrolling with a truly unique play mechanic. On top of that, it's one of those even more rare games that don't cost an arm and a leg! My copy of Wizball was only \$15.95 at a local store.

Unfortunately, the packaging really doesn't do the game justice, and I probably would have passed it over if I hadn't run into a true Atari fanatic at the store that day. He was making his monthly pilgrimage from the Toledo, Ohio area to the Detroit area stores to see what was new in the Atari world. He recommended Wizball over the more expensive games I'd been looking at, so I decided to give it a try.

The story line for the game sounds an awful lot like Attack on Pepperland by the Blue Meanies. Wizworld has been attacked by the evil Zark, and all color has been drained from the landscape. Wiz (you) and his faithful companion Catelite have to kill the horrible sprites guarding the world and restore color to the land.

Unfortunately, a "truly unique play mechanic" doesn't always translate into an easy-to-play game. When you first enter the game, the "Wizball" which represents YOU is bouncing helplessly around the screen. You can control the speed and direction it rotates, and thus the speed and direction it will bounce, but with virtually no control over where it goes. I spent many frustrating hours trying to do something more than die instantly when my Wizball bounced into one of the enemy sprites. The instructions

are very unclear about what to do, though they do allude to "icons" which will give your Wizball more powers.

I can understand the game designers wanting to leave some things up to the players to find out for themselves, but something as basic as how to control the character on the screen should be fully explained.

The first set of aliens you encounter look like slowly spinning DNA molecules which don't move around at all. The only danger from them is that your wildly bouncing Wizball will touch them and be destroyed. If you manage to shoot one of these, it turns into a green "pearl." Running over the pearl (easier said than done) will cause an icon at the top of the screen to flash. Each subsequent pearl causes the next icon in the row to flash. If you "wiggle" the joystick back and forth while a particular icon is flashing, your Wizball will gain the power the icon represents. Ah...! A light dawns...! The first icon lets you move the Wizball left and right with more control, although it still bounces wildly. The one that appears in the first icon position after that will give you COMPLETE control over the Wizball!

Once you've managed to gain control by obtaining these icons, the game becomes completely playable, and enjoyable. In a way, it's ironic that the difficulty of the game actually DECREASES as you play. With more icons, you gain better firepower and shielding, while the game itself really doesn't increase in difficulty very much from level to level. I wonder how many beginning players will simply drop the game out of frustration, before they discover how to gain control and really enjoy the game.

There's one picky little complaint that I had about the game design. There's no "start the game over" or suicide button to let you restart a game that's going badly. With many games this really isn't necessary but I've found, even now that I know what to do, I may die almost instantly, wasting one of the three Wizballs. I'd rather just start over, but no convenient way is provided. If you think staying alive is a challenge in this game, try dying on purpose...it's just as difficult!

One of the icons brings the Catelite into play. Simply killing the nasty sprites with your Wizball isn't enough. Some attack waves, instead of being sprites, are serpentine strings of paint bubbles. The Wiz must shoot the bubbles, releasing the paint droplet inside. Unfortunately, Wiz cannot collect the paint himself, so he must direct the "Cat" to catch the droplet. This action involves another part of the rather unique play mechanics of the game. In a one player game, you must learn to coordinate controlling both the Wizball and the Cat with the same joystick. By holding the Fire Button depressed, the joystick takes over control of the Cat, allowing you to grab the paint droplets. Unfortunately, this also freezes the Wiz, sometimes fatally, until you release the button. It's an action that takes some getting used to, although it's not all that hard to learn.

In a two player "team" game, one player controls the Wiz, the other controls the Cat. The only problem with this arrangement is that the Cat player spends a lot of time just watching, until the Wiz player can manage to get the Cat icon activated. The Cat has a limited life, and contact with nasty things will eventually

cause it to die, leaving the Cat player as a nonparticipant again, until another Cat icon can be earned. (Listening to two young Wizball players, you'll often hear "I wanna be the Wiz this time!!")

There are many special features in the game, such as paint droplets that confer extra lives on the Wiz or the Cat, and ones which will cause more undesirable things to happen, such as turning out the lights!

The object on each level is to collect paint droplets of three different colors, and fill the "color cauldrons" at the bottom of the screen. Each level has only one color available, and at the beginning of the game you're limited to Levels 1 to 3. When you fill the "target cauldron" with the colors for that level, you're given a bonus round, and then a trip to the "Wizlab" where you can trade in the bonus points for permanent icon powers, or take the points for a huge score increase.

By the time you get several of the permanent powers, you'll find your Wizball will be almost indestructible unless you get careless. As I mentioned, the difficulty of the later levels really isn't all that much higher, so there isn't quite as much challenge as there could have been.

Finding the entrance to Level 3 can be rather frustrating. I spent a long time wondering why I couldn't get another bonus level before I noticed that one of the "tubes" between levels had small markings which looked like an arrow pointing down. This

turned out to be the secret entrance to Level 3, but I almost gave up on the game before finding it.

Other levels use different devices to indicate the direction which the tubes will take you, but none are as hard to figure out as the first. One other thing I ran into was that the game seems to have a problem with its "ending." The ST version has 8 levels, which you have to run through several times each. There comes a point where you can't advance any farther, but the game doesn't end. You're left on your own, shooting things, but without any further challenge. I'm still not sure whether I'm missing something else or whether the game designers never expected anyone to reach Level 8.

Even with all my picky little complaints, I like this game...very much. It's the kind of game that grows on you, assuming you stick with it long enough to get past the initial high frustration it presents you with. The music in the game is excellent, and the graphics are extremely well done. The backgrounds for the different levels are very imaginative, and the enemy sprites come in a wide variety of extremely colorful shapes (one of them looks like a cloud of mauling Compact Disks). Wizball is an excellent value for anyone who's looking for something "different" in a game.

Wizball is a product of Ocean Software Limited, distributed in the U.S. by Mindscape, Inc.

How much is YOUR time worth?



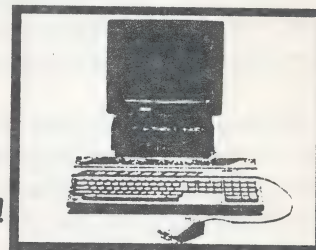
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Epson Emulator for Atari Laser Printer

by Graham Thomas

Well, Atari UK finally released the Epson FX-80 emulator for the Atari laser printer, the one that some other European countries have been selling for months. As usual, Atari made a bit of a mess of it.

Pluses

First, the good news. The emulator itself seems to be basically OK, though not perfect.

Using it with First Word Plus, we've found it occasionally loses its way and forgets to print a chunk, or prints the same paragraph several times over. Reprinting usually solves the problem, and I'm not sure what exactly causes the glitches.

IMG graphics in Wordplus documents now print out very nicely, and at the correct size as indicated on screen. Screen-dumps are also nice, in any one of five sizes from postage stamp to A4 (provided you have the RAM for the latter - you may need up to 1 meg for the buffer!).

The set of fonts which Atari has included lets you print text in pica, elite and (non-standard, 5cpi) expanded formats, in the most popular styles (bold, underlined, italics), and with proper sub- and superscripts (except for expanded).

Minuses

The bad news is: no condensed print (font not supplied), no 1.5-line spacing (fontheight governs linefeed, so until someone produces a set of 1.5-line high fonts...), not all combinations of styles in all typesizes. The emulator can handle

several different font formats, including GDOS fonts, so improvements are a matter of putting together better font libraries (again, you need lots of RAM) or waiting for kind souls to submit their collections to the PD libraries.

Helpful tips

One important tip for users of First Word Plus: use the INSTALL.PRGM from your version to reinstall the PRINTER.HEX file supplied with the emulator.

The PRINTER.CFG file supplied by Atari is likely to be for a different version from the one you have. (My suspicion is that it's the one for the German version current in November 1988 - the PRINTER.HEX file has a lovely German explanatory preamble, which shows how much customising Atari UK did!) Finding this out lost us an afternoon.

Documentation

The documentation with the emulator is a 60-page booklet which, although at times a little cryptic, is adequate. It's therefore a huge improvement on the non-documentation that was sent out with the Diablo emulator.

We haven't tried printing from a self-written C, Pascal, Basic or whatever program yet, but the docs appear to provide enough information on the necessary control codes, including the extra ones that make the laser printer do a few things a real dot matrix printer can't.

Verdict

OK so far, but I was let down by sloppy presentation on the part of Atari UK. The people from the German firm DMC, who wrote it, seem to have done a pretty good job. Now we need a better set of fonts. Cost is 29.95 UK pounds.

Post Script

I keep asking about Ultrascript, but Atari UK won't say when that might see the light of day in the UK. They really aren't committed to getting the ST into business and educational markets, whatever they say in their press releases. Shame.

[Editors' Note: Graham Thomas can be reached by mail at: SPRU, Mantell Building, University of Sussex, Brighton, BN1 9RF, UK or Phone: +44 273 686-758.]



"Take us to your electronic game center."

A New Shareware Program from Bob Puff

by Stephen Moffit (TACE)

(c)April, 1989

This is a program for Atari 8bit users who wants it all (well, mostly all!) for their "modeming" without having to spend a lot of money on it. (I know you, ahem, cheapskates are out there. I am one.)

BobTerm's Requirements

This is a nice program that will work with your modem through the 850, P:Rconnection, all known RS-232 interfaces and most direct-connect modems (such as the SX-212).

A minimum of 48K is required — giving you an 11K buffer!. Note: Other than the MIO, the "Black Box" and the 850/

P:Rconnection, no support is included, so you will need a modem driver from another source. Bobterm has been tested with many DOSes including MyDOS 4.5, which he wrote, and SpartaDOS X.

BobTerm's Features

Okay, now some features (I bet you couldn't wait!):

Translation options included are: ASCII, ATASCII, and VIDTEX, a CompuServe translation mode.

Baud RATE: Up to 19.2K (for null modem through-put).

Duplex: Full and Half. It will also echo characters from another modem if that other computer is in full duplex, called Echoplex.

Dialing Type: Will dial both tone and pulse, assuming your modem or phone system will support it. MPP does not support Tone dialing. You may send Originate, Send a Carrier (Answer Mode), and Hang Up (provides for modifying for modems that do not support this).

Added Features

I know, no transition, but... Some other features include quitting to DOS without drop-

ping the carrier so you can load other programs such as ARC!

Did I mention the transfer protocols? No? Well they are XModem, XModem-CRC, 1K-XModem, Ymodem(batch), CompuServe Fast XModem (meant to speed up THAT XModem) and Fmodem (also ASCII XON/XOFF).

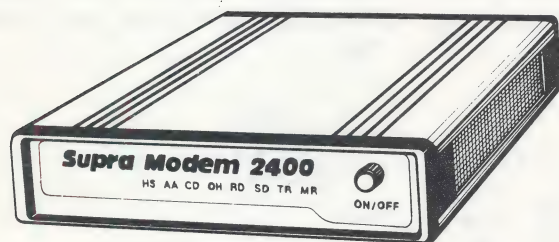
You may do most DOS functions from here, including loading a file which may be used to load modules in the future. BobTerm supports sub-menus when using DOSes that support that function. You have eight "large macros" of 31 characters each and eight "small macros" of 15 characters each. You also can define one character macros for up, down, left, right, and fire button on your joystick! Automatic AsciiAtascii translation (and back) is offered.

In Summary

I would say that the dialing menu is somewhat similar in look to the Express! menu, and as such is quite nice.

My impression of this program is that it is a very nice program with a better "look" than Express! and a better "feel." I have uploaded large files at 2400 Baud using 1K-XModem and met with easy success. The documentation file is about 15 pages long and is quite complete.

Once again, Bob Puff offers us a professional quality program at a decent price (a donation), we should thank him for this quality program and reward his efforts.



Single-Sided to Double-Sided ST Disk Upgrade

by Rod Smith (WAUG)

Are you an ST owner with one single-sided and one double-sided disk drive? Annoying, isn't it, not being able to directly copy a file from one double-sided disk to another. Or do you perhaps have only single-sided drives? Wouldn't it be nice to halve the number of disks you've got by making them double-sided?

Well, you can! The ST's disk drives are pretty much industry-standard, although the connections to the ST are not. This means that, if you've got an SF354 single-sided drive, or an internal single-sided drive, it's possible to replace it with a double-sided mechanism for about half the cost of a new double-sided drive from Atari. For 520ST-FM owners, in fact, this is the *only* way to upgrade to a double-sided drive, short of trading in your computer for a 1040ST.

Some Caveats

This project, while not terribly complicated, is not for the faint of heart. It involves opening up your ST's drive (or your ST, in the case of internal drives) and swapping components. As such, it will void your warranty, assuming it's not run out already.

I can make no guarantee that it will work for you, especially if your system is different than mine or you use a different drive than I did. You may have trouble getting the new mechanism to fit neatly in the old drive housing. You will also likely be out the cost of the replacement mechanism if something goes wrong.

How I Did It

Bearing these caveats in mind, then, how is it done? The procedure I'm about to describe is how I replaced my SF354; the details will likely be different for you, since my SF354 was very old (with an eject button in the lower right-hand corner) and since you'll likely get a new double-sided mechanism from a different source.

My adventure began when I saw an ad for an external 3.5" drive from Radio Shack on sale for \$99.95 (catalog #25-1061). This was a lower price than I'd ever previously seen on such mechanisms, so I decided to go take a look, and ended up buying one.

Other sources for 3.5" mechanisms can be found in ads in electronics magazines and Byte. One such source is Jade Computer, in California. Their phone number is (800)421-5500. You could also check with local computer stores; ask for a 3.5", double-sided drive mechanism for an IBM PC. A typical price seems to be about \$120 for what's generally a kit for mounting the drive in an IBM PC. If

you're replacing an existing mechanism, you won't need a power supply, drive controller, or extra mounting hardware, so don't pay extra for these things.

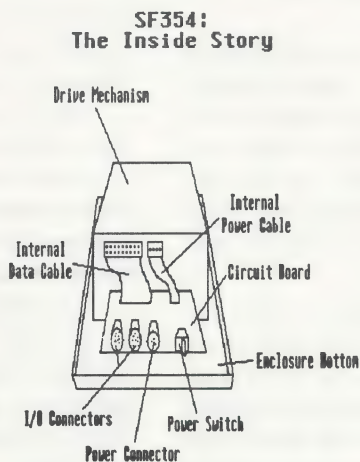
If possible, buy a drive with an eject button and "disk busy" light which are in the same location as they are in your existing drive. This is especially important if the drive does not include a case or if you're buying it to replace an internal drive. I'd avoid drives marketed for the Macintosh, since Mac drives have been modified in strange and mysterious ways, and they're thus more likely to give you troubles than more traditional drives.

When I got my new drive home, I opened up both it and my SF354 (after unplugging the drive from the wall, of course). The SF354 has seven screws on the bottom. Remove the four outermost ones first; this will allow you to remove the top cover of the drive. The remaining three screws hold the drive mechanism in place, and these should be removed as well.

The Heart of the Beast

You now see the workings of your disk drive, as illustrated in the figure. There should be a small circuit board, with a pair of cables leading to two connectors on the drive mechanism itself. The larger cable carries data signals to and from the drive, while the smaller feeds power to the drive. Your new mechanism should have similar connectors, and possibly a circuit board of its own.

Disconnect both cables from your single-sided mechanism and plug the cables into the new mechanism. The cables may be difficult to unplug. I used a small flat-



ead screwdriver to pry them apart. *Be careful* when doing this, though; snapping off one of the prongs could cause serious problems. When I did this, I actually moved the circuit board from the SF354 to the Tandy drive, rather than swap the mechanisms, since this was quick and I wanted to test the setup. *This is something you should do.*

When you've plugged the new mechanism into the SF354's circuit board, you can test the drive. Plug it in just as you would the SF354, and turn on your system. When I did this, I found that my new drive didn't work! After a few minutes of near-panic, I discovered the trouble.

The Teac drive mechanism which Tandy used had a number of pairs of pins on the top of the drive mechanism, some of which were covered by metal-and-plastic caps, so as to make an electrical connection between the pins while insulating them from other pairs of pins. Some of these pins were labelled "D0," "D1," "D2," and "D3," and a cap was placed on the pair labelled "D1." Since I knew that every ST drive "thinks" it's the first drive, and since these labels looked suspiciously like drive numbers, I used tweezers to move the cap from "D1" to "D0." I then re-connected the system, and everything worked! Other mechanisms may have a different means of selecting drive number, so you may have to examine your drive carefully in search of such an option, should it not work when you first connect it to your ST.

All The King's Horses...

Now it's time to put everything back together. Since the Tandy drive I purchased had an eject button immediately below the center of the drive slot, in a very different location than the placement of the button on my SF354, and since the Tandy came with its own enclosure, I decided to leave it that way. I replaced the metal RF (radio-frequency) shielding and discovered that the cables to the connectors (which necessarily sat rather far within the housing, since the Tandy drive is deeper than an SF354) would not fit through the only hole in the housing. Fortunately, the top and sides of the housing are plastic, so I merely cut out a corner in the back large enough to admit my power cables. It was then simply a matter of putting the cover back on.

This setup has the disadvantage of an inaccessible power switch and cable connectors. Since I have a surge protector/power strip, this isn't a real concern for me, but it might be for somebody else. Those wishing to place a drive in an Atari housing will likely have to remove the front pieces of the drive mechanisms and swap them. This might be difficult, since there's no guarantee that mounting screws will be located in the same place (they aren't on my drives).

As mentioned before, eject buttons and activity LEDs may be placed differently, as well. It may even be necessary to cut holes in the front of your Atari drive (or 520ST-FM case!) to get everything to work. Once you've worked through this problem, you might have trouble mounting your drive in the SF354 case, since (as with the faceplate) mounting screws are not guaranteed

to match. Once you've worked around any of these problems which may arise, put the case back together.

One possible way to avoid these problems altogether might be to open up your drive before even purchasing a replacement mechanism. Find the manufacturer's name and any other identifying marks, such as model or serial numbers. Then look specifically for the equivalent double-sided drive. Since Atari has used several different makes of disk drive, there's no guarantee that your neighbor's drive will be the same as yours, or even that your two drives will be the same inside.

In other words, examine whatever drive it is you're going to upgrade. If these problems prove nearly insurmountable, don't panic! You could nail together your own wood enclosure, or perhaps use something else, such as a lunch pail or even (gasp) a "generic" external drive housing. These options are less viable for 520ST-FM owners, but they might still be workable if you construct extension cables for your data and power lines.

Some Speculation

If you want to buy a non-Atari drive as an *addition* to your system, rather than as a replacement for an existing drive, it may be possible, but would require additional equipment. Depending on the drive you get, you may need an enclosure. You'll also need a power supply and appropriate cabling to reach the new drive. Your situation in this case is basically the same as connecting a standard 5.25" IBM drive to your ST. I refer you to David Small's article, "ST Uses IBM Disk Files," in the November, 1985 issue of *Antic* magazine for more details. I'll add, though, that the additional hardware purchases necessary for such a project will likely bring the total cost to near what you'd pay for a new SF314, so it's probably not worth the effort unless you already have some of the necessary components gathering dust in a closet.

All Done

With any luck, you've now got a functional double-sided drive where you used to have a single-sided one. So far, my new drive has read every double-sided disk I've put into it, and my old double-sided drive has had no trouble with disks formatted by the new one. The new drive will format (and read) to 83 tracks of 10 sectors each, so I have no difficulty using extended formats.

I have encountered one problem, however: the new drive seems to be less-than-diligent about reporting disk swaps to the ST; sometimes it will report them, other times not. This is not a major problem, however, since certain actions, such as placing a write-protected disk in the drive, will force correct behavior. Other drives may or may not have this problem.

I certainly hope that anybody attempting this modification has as much luck as I've had. I've heard of it being done before, so I know that my case isn't simply a lucky fluke. I welcome any questions or comments. Send them to AIM or post them on the Treasure CheST BBS (313-973-9137) or Molin's Den (313-420-0407) BBS.

... the way the ST could have been is now a reality ...

QUICK ST and the Quick Family of Shareware

"The reader program is outrageous. It's great! The latest version of Quick ST is extremely reliable and well worth the effort..." Ralph Mariano, editor/publisher ST Report Online Magazine

by: Darek Mihočka
Ignac A. Kolenko

Quick ST

**only a \$20
shareware
contribution
to register!!**

- * speeds up screen output
- * handles both **VT52** and **GEM** text output
- * supports RAM-loaded fonts (Turbo ST doesn't)
- * fully configurable - runs as desk accessory or as a standard program - simply rename it!

- * uses only 32K main memory
- * supports Hyperscreen and other non-standard screen sizes (Turbo ST doesn't)
- * does not require blitter chip
- * works with all standard desk accessories & TSR's

Turbo ST is a trademark of SofTrek

for an additional \$10 contribution, you will receive 6 extra Quick shareware titles:

Quick View

- views any text file quickly
- view Atari 8 bit files as well
- display 25 or 50 lines on mono
- more powerful than Desktop 'Show' feature
- configurable as "installed application"
- automatic table of contents generation for reading ST Report Online Magazine

Quick Find

- allows the user to perform group file operations on any combination of drives/hard disk partitions
- allows any search mask to be used
- options include: search, touch, hide unhide, write protect, un-write protect, delete and 'arc' bit setting
- can print to screen, file or disk
- easy to produce disk catalogs with this program

Quick Index

- the **de-facto** benchmark for the Atari ST
- benchmark 3 main categories:
 - CPU performance
 - disk performance
 - screen performance
- use it to benchmark Quick ST, the blitter, 16MHz boards, disk formatters/drives, OS patches
- TOS 1.0 & 1.4 reference figures

Quick Inf

- allows easy editing of various desktop parameters not editable from the Desktop normally
- easily add multiple installed applications (Desktop can't)
- change the window search masks (Desktop can't)
- change drive/trash icon names
- load in new DESKTOP.INF at any time

Quick Label

- allows the editing of 10 labels at one time.
- simple, but powerful printer format commands built in
- change configurations at will
- print multiple copies of any combination of labels
- label consists of 10 lines of up to 40 characters each
- easy to use user interface

Quick Print

- fast, text-only screen dumps to the printer
- similar to the print screen feature found on pc's & clones
- excellent for VT52 screens - receive your screen dump in seconds rather than the minutes it usually takes for graphic dumps
- configurable accessory

All titles work on any ST with at least 512K RAM, colour or monochrome
We are **always** listening to new suggestions and ideas. Reach us at:

Compuserve: 73657,2714

Darek: (519) 747-0386

GEIne, Delphi, BIX: DAREKM

Ignac: (519) 747-9452

Usenet: watmath!watcgl!electrolignac, ignac@electro.com

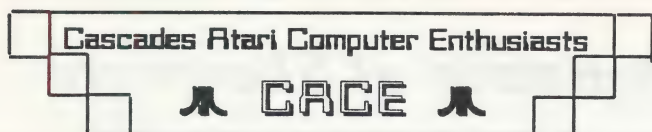
All software is **NOT** copy protected - installs easily to hard disk.

Registered owners can receive updates for just \$3 to cover postage/handling costs

Mailing Address:

DAREK MIHOČKA
P.O. Box 2624, Station B
Kitchener, Ont. N2H 6N2
Canada

ST is a trademark of Atari Corp.



Cascades Atari Computer Enthusiasts (CACE) is the Atari club in and around the Jackson County area. The main purpose of the club is to help inform new users and to promote the use of Atari computers in the community.

President	Brent Fisher	764-4599
Vice-President	Tim Hotchkiss	522-8912
Secretary	Joe Cripps	782-0199
Treasurer	Craig Schaff	787-3970

The current membership dues are \$10 per year, or \$14.80 if you wish to subscribe to Atari Interface Magazine, and are payable at any of the CACE monthly meetings, or by mail. Club membership includes access to the entire club software and publication libraries, along with a monthly published newsletter. Any written communication with CACE or payments by mail should be sent to: CACE, P.O. Box 6161, Jackson, MI 49204. Our meetings are held on the second Sunday of the month, from 1 pm to approx. 4 pm. The meetings take place at the East Side Lounge, on the corner of Horton and Gansom Streets in Jackson, MI.

FISHIN' AROUND by Brent Fisher

Well 8-bit owners, it looks like Atari is going to support us after all. A couple of months ago Atari Explorer Publications came out with their first issue of Atarian Video Game Magazine. In there I found (believe this or not) a previews section. In this

section Atari announced that they are bringing out Commando, Ikari Warriors and Xenophobe for the XE Game System (this includes us XE and XL owners too).

These guys even had an interview with Nolan Bushnell in the May/June issue. But it does indeed look as though Atari is going to support us, at least with as many games as we are willing to buy. I personally like the looks of some of the video games that they had in there, I just wish that they would bring out some of the out of production productivity software that would really be useful, but of course only time will tell.

Anyway this new magazine isn't too bad for two bucks, I just can't figure out why they would want you to get a subscription when it is cheaper to buy it from a bookstore. The subscription fee is \$12. While the newsstand fee is \$11.70. Not a great deal of difference but at least it'll get you out of the house for some exercise.

Well on with some important news. Yes, the C.A.C.E. BBS is up and running. Yes I know that we had it down for a while, but we were only making some improvements. So if you have a modem and would like to tell us if we did it right or wrong give us a call at (517) 787-4011. We would love to hear from anyone, who likes Zmag and a good conversation.

All of you golf fans out there (well those of you in the 8-bit

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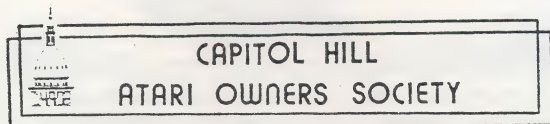
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Please make check or money order payable in US funds to Unicorn Publications

world anyway) will be interested in knowing that Atari is releasing Mean 18 Golf sometime later this year. With a little luck maybe they will have it with them when they come to the World of Atari show in Detroit. Yes if you are reading this and you didn't make it to the show you missed it. But don't fear I promise to tell you all about it since I plan on going and seeing everything possible.

Does anyone read my column just to find out when the next meeting will be? If you do I suppose that I should just come out and tell you all when it will be. But then again I am kind of torn between letting you know now or waiting until the end. Ah, what the heck, the next meeting will be on Sunday, July 9th. So I hope that one and all will come and join us at the East Side Lounge, on the corner of Ganson and Horton.

I was reading Zmag issue 160 and in there I noticed Jerry Cross reviewing a book called Master Memory Map. He said that he liked it better than the wonderful Atari treasure trove Mapping the Atari. He also talked about the Authors Robin Sherer and Craig Patchett. If I'm not mistaken these two people have been writing columns for ANALOG for the past year. In fact Robin Sherer's column was entitled Master Memory Map. So if you can't get a hold of Zmag 160 or the book that Jerry wrote about (there should be no reason not to, all you have to do is call the C.A.C.E. BBS), check out the last ten issues of ANALOG. I believe that this is probably one of the finest tutorials on the Atari 8-bit memory locations around.

Anyway people, that's the news and I am out of here.



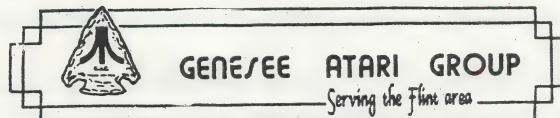
CHAOS is the Capitol Hill Atari Owner's Society, serving the Atari community of the Lansing, Michigan area. The Campus Hill Atari Owner's Society is the Michigan State University chapter of CHAOS.

Membership dues are \$15.00 per year and entitles members to a 1-year subscription to the Atari Interface Magazine, a free disk from our regular library, and access to our libraries and other resources. Dues may be paid at any CHAOS meeting or by mail. If not using an official membership application, please include your name, address, phone and a list of your equipment and interests.

Sysop John Nagy and CHAOS invite you to call one of the country's finest BBSes at 517-371-1106, 300/1200/2400 baud, 24 hours a day (Atascii/Ascii) serving both 8 and 16 bit Atari computers. Send inquiries regarding CHAOS, mail orders, memberships and so on, to: CHAOS, PO Box 16132, Lansing, MI 48901.

General meetings of the membership take place several times a year. 8bit and 16bit Special Interest Group meetings take place monthly. The S.T. Interest Group meets on the second Saturday of the month. The 8bit S.I.G. meeting, for 400/800 and XL/XE owners, takes place on the third Saturday of the month. Meetings begin at 10 a.m. sharp and last until 1 p.m.. Members and guests are welcome to any SIG meeting that interests them.

Illegal copying, or any violation of copyright laws, is not condoned or allowed at any CHAOS-sponsored function, including the club BBS.



The Genesee Atari Group is a non-profit group of Atari owners in and around Flint, Michigan. Our purpose is to provide assistance to users of Atari personal computers. This organization is not affiliated with Atari, Inc.

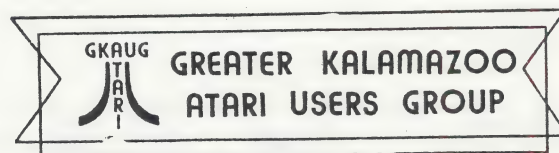
GAG meets on the second Wednesday of the month at the Neithercut school, located at 2818 Crestbrook Drive, Flint. (Off Atherton between Hammerberg and Van Slyke). Meetings begin at 6:30 pm. All are welcome. GAG is a participating member of the Atari Interface Magazine, and members can purchase subscriptions at a greatly reduced rate. GAG is also affiliated with the Great Lakes Atari Digest, and members receive a free subscription with their membership. Membership is \$15 per year for the family.

GAG has an exceptional public domain library of 8- and 16-bit software. Contact one of the officers to receive a complete catalog. GAG also has a large magazine library for use by its members, including Antic, Analog, ST-Log, Start, and several others. We do not support piracy. Piracy is theft!

For more information contact:

The Genesee Atari Group PO Box E Flint, MI 48507

Jerry Cross	President	736-4544
Dave Pettit	Vice Pres.	232-0508
Ed Kalush	Librarian	517-288-4531
Gil Merciez	Librarian	
FACTS BBS		736-3920



GKAUG meets on the second Saturday of each month at 11 a.m. in the Dewing Hall, Room 305, on the Kalamazoo College Campus, corner of Academy and Monroe. Dues are \$25/yr and include a subscription to Atari Interface Magazine.

President	Frank Fellheimer	657-6106
Vice President	Dan Youngs	
Treasurer	Dave Bryant	
Archiver	Dave Oldenburg	
SysOp	Alex Stevens	
GKAUG BBS		(616) 657-2665

Next meeting: Saturday, 09-Sep-89. We are not scheduling meetings for July/Aug this year. Your AIM will come in the mail as usual...if your dues are paid, of course.

For those of you that would like to know what happened to the June meeting... its too late now.

I, for one computer member, have been very busy trying to rewrite some of my programs for my Star NX-1000C Rainbow printer. I have been working on disk labeling programs. I wanted to be able to select any of the seven colors available on my printer so I can make my labels more appealing and categorize them by color instead of buying colored disk. I have been quite successful even with my limited knowledge of programming.

I have given out this program before, and it is still available to our members... contact me if you have use of this color upgrade.

I started this program because I have not seen many utility

programs available to take advantage of the color printer capabilities.

I also installed a US Doubler in my 1050 drive. It works just fine, but I had to take the drive apart twice because I didn't have a IC socket adapter. The directions mention you may need one, but you don't know until you take it apart at least once. As it turns out, I really need two since my drive was manufactured in Singapore. The socket is available from ICD for \$4 each. This has a tendency to increase the price of the US Doubler, but it has been working just fine.

I have been using my SPARTADOS-X cartridge for a month or so. I am getting better...I have been able to access the drive on startup, know how to write the boot files from DOS and am able to go back and forth from DOS without losing my Basic program. Basically, it has improved my access time getting into my programs.

Haven't had a chance to get together with any of the officers, but I should within the next couple of weeks and I will be able to check up on what new items they are working on.

I hope to keep you informed for the next two months, so check your AIM.

Call me if you want to consider a new position of leadership in the club. I may not be able to continue in this position this next fall.

Frank

Great Lakes 'GLASS', Michigans only
Atari 'ST' only Users Group
ST Support I ♥ MY ST!

Meetings - First Thrusday every month, 6 p.m. to 9:30 p.m., Athens High School, 4333 John R. Troy, Mi., 1/10 north of Wattles <17 Mile> - Room 1528 - Mailing Address - P.O. Box 99737, Troy, Mi. 48098 Phone - (313) 828-1653 after 4 p.m. - Steve Mileski, president

Dues - \$1.00 per month, ie: join in April - pay \$9.00, all memberships expire on January 1, each year. Non-members welcome at no charge.

Looking for PD software?
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Over 400 8bit disks and
200 ST disks to choose from!
8bit disks \$3 --- ST disks \$4
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Order 3 disks, get the 4th FREE!
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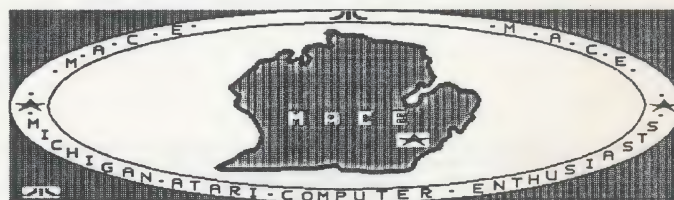


Next Meeting: 6:30 P.M. Wednesday, 5 July 1989. Wyoming Public Library. 3350 Michael S.W.

Tim Feenstra	President	(616)784-6230
5625 Buthview N.E.	Comstock Park, Mich.	49321
Greg Williams	Vice President	(616)698-7319
George Nosky	Treasurer	(616)942-1527
Bob Bulliment	Secretary	(616)457-1766
Chuck Baughman	Librarian	(616)795-7373
Terry Reine	Membership	(616)698-7244
Gary Heitz	Director	(616)676-0112
Gerry Borysiak	Director	(616)896-9358
Charlene Bird	Director	(616)795-3593

With summer vacations here there is not much to write about. The July and August meetings will be informal show and tell get togethers. If you are coming to them and have anything of interest, unusual, or a new way to use an old product, bring it to the meeting and show it. We'll try to have a few things there, including the disk library data base as it gets further along.

I am looking forward to the World of Atari show in Dearborn, these shows are great to browse around, find a few good deals, and catch up on the new stuff out for the Atari. I hope to see some of you down there (of course this will be past by the time you read this). HAPPY COMPUTING TIM



Michigan Atari Computer Enthusiast members receive, as part of their dues, Atari Interface Magazine, a monthly magazine keeping them informed of what is new in MACE and the whole Atari community. Members are also entitled to purchase disks from the 8bit and ST public domain software libraries. 8bit disks are \$3 each and ST disks are \$4 each, and if you buy three disks from either library and you can choose a 4th disk absolutely FREE! Non-members may purchase disks at a slightly higher rate. Mail order is also available. For a catalog of current disks in our libraries, send \$2 for either an ST or 8bit catalog to the MACE address below. Please indicate ST or 8bit when sending in your order.

The most important benefit you receive is the help and support from (and interaction with) other Atari owners. If you're having a problem, need advice about a software package or whatever, your fellow MACE members can and will help. That's what a user group is all about -- helping each other get the most from our computing.

MACE meets on the third Tuesday of each month from 7:30 to 10 pm in Room 115 of the Southfield Civic Center at 10-1/2 Mile and Evergreen Roads.

MACE can be contacted at PO Box 2785, Southfield, MI. 48037 or by calling Bill Rayl at (313) 973-8825 or Bob Retelle at (313) 483-7358.

Any MACE member who contributes an article which appears in Atari Interface Magazine is entitled to a free disk from the library of his/her choice.

MACE BBS Numbers:

MACE WeST	(313)582-0657	(3/12/2400)
MACE East	(313)978-1685	(3/1200)
The College Board	(313)478-9647	(3/12/2400)
Down River Outpost	(313)675-4660	(3/12/2400)
Molin's Den	(313)420-0407	(3/1200)

MACE Minutes, June Meeting

The June '89 meeting of the Michigan Atari Computer Enthusiasts was held on Tuesday, June 20, at the Southfield Civic Center. Meeting Coordinator Bob Retelle called things to order at 7:45pm noting the feature topic would be "New Users" in which novice Atarians would be able to ask any questions they might have about using their computers. Bob then went on to discuss what's new in the Atari world, ranging from TOS v1.4 to new/upcoming releases of games for the XE game system to announcing that Astra Systems had gone out of business.

With help from members Mike Lechkun and Brian Wilmoth, Bob described the recent Consumer Electronics Show which was followed by a video tape, complete with narration by former officer Jim Kennedy.

Bob polled the audience for questions about using their 8-bit computers, and (to his surprise) got NONE! It would appear there are either no new users or they are all very shy! Bob then easily answered the three questions he got about using an ST, and then went on to show the "ST Intro" program and announced it was available in the ST Disk Library.

There was some discussion about the upcoming (this week-end...) World of Atari show to be held at the Hyatt Regency in Dearborn. Flyers were available and members Mike Lechkun and Jerry Cross sold advance tickets for \$3/one day and \$5/two days.

Bob announced there was a paper bag full of current and back-dated issues of Video Gaming magazines which had been donated by Soft House of Garden City. (Many thanks to Larry Berman for his support.) The meeting was adjourned at 9:45pm.

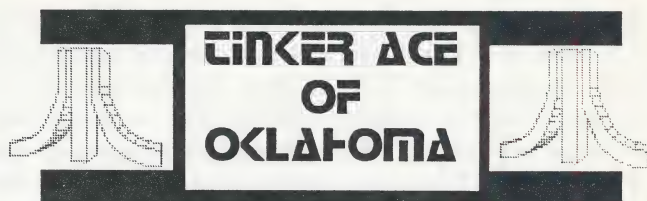
The next meeting will be held on July 18 and will feature (tongue in cheek) "Those Useful Programs You Should Avoid." If you've got a gripe about a particular piece of software, now's your chance to vent some frustration! Contact any of the MACE officers if you'd like to share your grief with the rest of the members.

Michael Olin, MACE Rec. Sec'y 6/21/89

Added Notes:

September is just around the corner, which means officer elections are coming! All positions are "Up-for-Grabs," so if you'd like to help MACE continue its strong support of the Atari line of computers, please support MACE by volunteering and running for the officer position of your choice. Remember that officers of MACE receive a free year's membership in addition to the free membership while they're in office. If you'd like to know what a position involves, just ask the current officer! Most of the positions only take a few hours time a month and help the club tremendously.

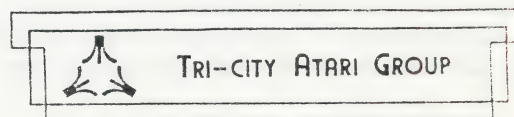
The new and exciting terminal program from Bob Puff called BobTerm is available from the MACE library, complete with printed documentation! The special price for the complete package is only \$5. MACE also selling 8bit disks for \$2.50 for 10 disks and ST disks at \$8 for 10 disks. If you're ordering through the mail, please add \$1 per 10 disks ordered. Quantities are limited.



TACE -- Tinker ACE of Oklahoma meets the first Saturday of each month at 1pm (12:30 set up time) in the Moore Public Library, 225 South Howard, just off of SW4th and I-35 in Moore. TACE can be contacted at Route 5, Box 539, Blanchard, OK 73010 or at the TACE BBS (405) 755-9561, 24hours., 3/12/2400 baud, running Oasis 4.3 software with over 60megs of online storage, ST & 8bit support. Dues: Full - \$20.00, Correspondence - \$15.00.

President	Michael Beard	(405) 793-7978
Vice President	Greg Ray	(405) 964-3765
Sec/Treasurer	Stephen Moffitt	(405) 732-8449
Librarian	Greg Yelle	(405) 390-9184
BBS SysOp	Rick Spencer	
Technical Advisor	Ron Hamilton	(405) 387-5649

Please note the TACE address has changed to:
Route 5, Box 539,
Blanchard, OK 73010
and the TACE BBS number is also changed to:
(405) 755-9561
with Rick Spencer as the new SysOp.



The Tri-City Atari Users Group meets the last Saturday before the 18th of the month, at 2pm at the Rudy Zauel Memorial Library, on the corner of Center and Shattuck in Saginaw Township. Upcoming meetings are July 15th and August 12th, 1989. Officers:

President	Steve Volker	(517) 793-2955
ST Librarian	Leroy Valley	(517) 686-6796
Treasurer/Sec'y	Marty Schmidt	(517) 792-6029
8 Bit Librarian	Ted Beauchamp	(517) 686-8872

Club dues are still only \$20, which provides support for both the 8Bit and ST, and full access to the club's PD library, along with a year's subscription to the Atari Interface Magazine. Check your mailing label, if you need to renew, (or haven't joined us yet!), DO IT NOW!

First Up... At our June meeting, being election time, the following individuals were "subscribed" into officer positions:

Steve Volker was nominated, elected, and assumed the duty of overseeing the meeting, just in time to participate in the formal voting, during which he was elected. Leroy Valley acquired the duties of ST Librarian and Technical Advisor in abstentia, but was later notified by phone. Marty Schmidt and Ted Beauchamp were not consulted, but were re-elected anyway. Free will government in practice. Sigh...

What You Missed... Bryant LaFreniere DAZZLED us with

an amazing demo of...well, let's see...he had Multi-Desk, EZ Draw (w/SuperCharger), and Mouse Accelerator installed in his Desk Manager, added EZ Tools, Scan Art, and Draw Art Pro, and ran it through CodeHead's new Hot Wire, while using Macro-Mouse to present a fifteen minute PRE-programmed demonstration of EZ Draw, with speech synthesis. Hmmm... Anyway it was great! Bryant put some real work into this one so how about a good round of applause.

What You Shouldn't Miss... Wayne Fenior, our newest member, will be demoing MasterCad on his Mega 2. Just moments after paying his membership dues to Marty, we put him to work! (Not bad, huh?) By the way, Wayne is the new ST Sysop for Charlie BBS with Paul Benkirt. He left us a few numbers; Saginaw (793-1014), and Freeland (695-2032), and said CALL!!

On the 8Bit side, Ted Beauchamp will be demoing Movie-Maker next month. This amazing animation program has a lot of surprises, so come and watch it with us! Also, Ted has offered to track down some information on the new 16Bit upgrade board shown at the Expo put on by M.A.C.E. last month. Things like how much does it cost? and where is it available? and can we get the company to come by and demonstrate it some time? Good luck Ted!

A motion from the floor and presented by Jerry Monroe, opened a discussion on the merits of lending support to A.U.A., the Atari Users' Association. (See related article in the last issue of AIM, pg. 22.) After everyone had a chance to express themselves, the original motion was seconded and passed. Steve Volker volunteered to contact them and report next month.

And Finally... How well have we weathered the storm? Through chip shortages, vaporware, shrinking software support, and the 'foreignization' of Atari, yet still we have endured, and long enough to see the other end of the tunnel. A hearty CONGRATULATIONS! to all of us, we've shown our mettle.

But NOW is not the time to sit on our laurels, it is time to secure a few footholds. We now have an Atari Corporation which finally fulfills it's promises, a great influx of new European software titles appearing, a growing voice through the Atari Users' Association, TWO local computer dealers willing to support us, an upcoming Atari-specific computer expo, and a powerful and exciting computer in our homes and offices. Now is the time to add to our numbers and share our secrets. Bring a friend to the next meeting! Post a notice! Tell somebody where you spend your Saturdays! Volunteer!.. Let's get T.A.G. growing again!!...

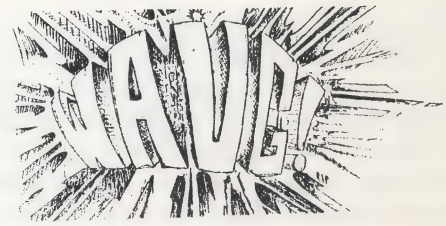
...Nuff' Said...

Equipment Volunteers for July:

Wayne Fenior Mega 2 Steve Volker Monochrome Monitor

Ted Beauchamp 8Bit computer and drive Jerry Reno 8Bit monitor

Remember, if you're bringing equipment, please bring all the necessary cables (i.e. power cords, monitor cords, mouse, or whatever.)



The June meeting was called to order at 7:30pm by President Jon Brode. Jon edited his usual "Hear ye! Hear ye!" such that it came out sounding more like "Listen up, Kiddies!" Jon was in top form as he eventually got around to announcing that this meeting would be the annual Election/Flea Market night. In what turned out to be one of the most entertaining meetings of the year, the members elected the following persons to the Executive Board for the '89-'90 term:

Craig Harvey, President

Rick Shraeder, Vice President

Mike Olin, Recording Secretary

Dick Selke, Treasurer/Membership

Mike Millage, 8Bit Librarian

Russ Crum, ST Librarian

Paul Walkowski&David Brzezinski, joint Newsletter Editors

Paul was nominated for the Editor position, and agreed to accept on the basis that someone else could fill in for him on the nights he could not attend the meetings. David was nominated and accepted according to the same stipulation, so the members were polled for agreement to accept TWO persons for one office. Upon consent of the membership, both were elected to the position.

The remainder of the evening was left to run its course as members bought, sold, traded, and/or otherwise swapped excess goodies amongst themselves. Most of the hardware and software was for the XL/XEs.

The next meeting will be held on July 11 in the Wolverine Room of the Michigan Union. The feature topic will be MIDI/Music, and we'll have plenty of musical hardware on hand.

Congratulations to the newly elected officers, and Bon Voyage to the ones departing.

From the Treasurer

First, I would like to thank everyone who attended the June meeting and unanimously elected me to a second term.

Now to business. Larry Mumford is our new member for May; David Garland and Steve Filler renewed their memberships.

We didn't do as well as expected at the MACExpo and could have used more help at the booth on Sunday.

Remember, if you would like to join our group or renew, please make your \$15 check or money order payable to:

Dick Selke,

31139 Cooley Dr.

Westland, MI 48185

See you at the meetings..

Mouse Balls

Submitted by Bob Retelle

[This text ACTUALLY came out of an IBM service database. Of course it's referring to the rubber ball inside a computer mouse...]

Abstract: MOUSE BALLS NOW AVAILABLE AS FRU (Field Replacement Unit)

TEXT: MOUSE BALLS ARE NOW AVAILABLE AS A FRU. IF A MOUSE FAILS TO OPERATE, OR SHOULD PERFORM ERRATICALLY, IT MAY BE IN NEED OF BALL REPLACEMENT. BECAUSE OF THE DELICATE NATURE OF THIS PROCEDURE, REPLACEMENT OF MOUSE BALLS SHOULD BE ATTEMPTED BY TRAINED PERSONNEL ONLY.

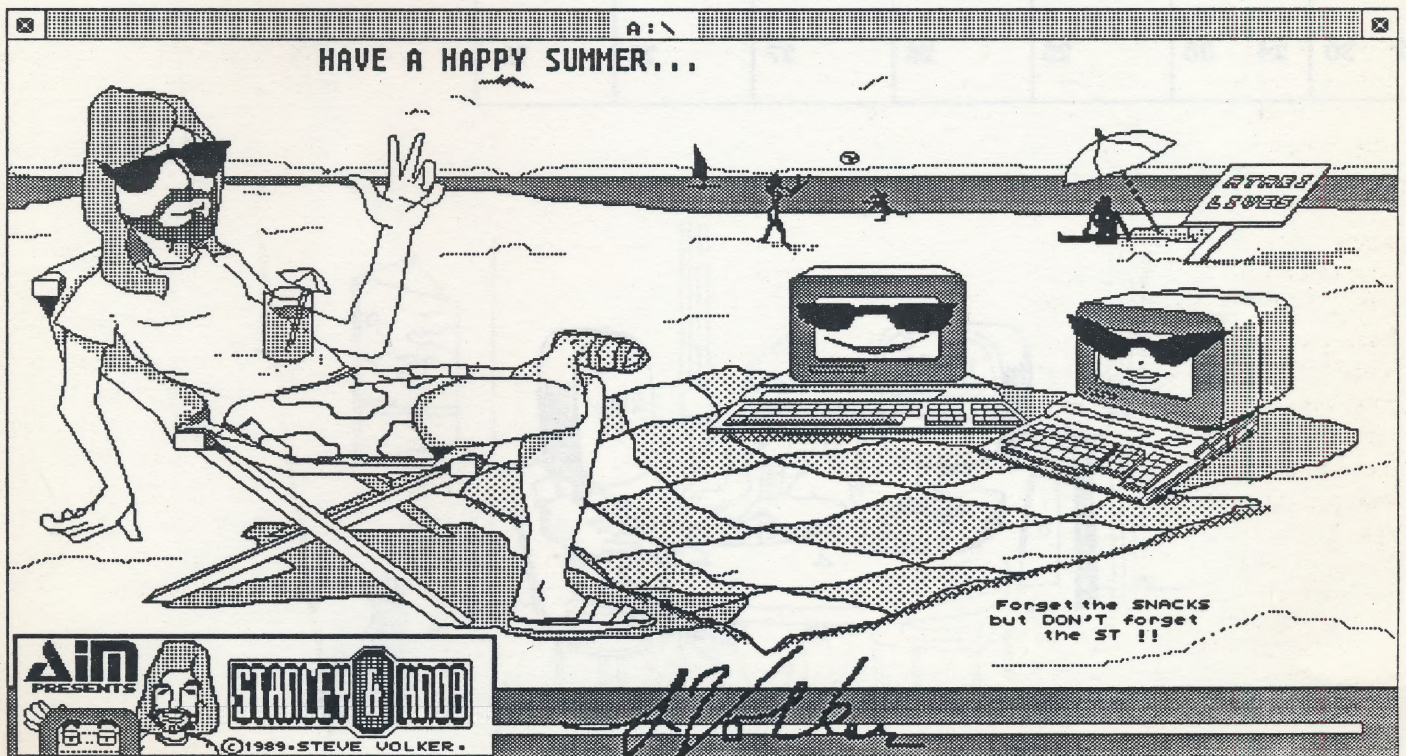
BEFORE ORDERING, DETERMINE TYPE OF MOUSE BALLS REQUIRED BY EXAMINING THE UNDERSIDE OF EACH MOUSE. DOMESTIC BALLS WILL BE LARGER AND HARDER THAN FOREIGN BALLS. BALL REMOVAL PROCEDURES DIFFER, DEPENDING UPON MANUFACTURER OF THE MOUSE. FOREIGN BALLS CAN BE REPLACED USING THE POP-OFF METHOD, AND DOMESTIC BALLS REPLACED USING THE TWIST-OFF METHOD. MOUSE BALLS ARE NOT USUALLY STATIC SENSITIVE, HOWEVER, EXCESSIVE HANDLING CAN RESULT IN SUDDEN DISCHARGE.

UPON COMPLETION OF BALL REPLACEMENT, THE MOUSE MAY BE USED IMMEDIATELY.

IT IS RECOMMENDED THAT EACH SERVICER HAVE A PAIR OF BALLS FOR MAINTAINING OPTIMUM CUSTOMER SATISFACTION, AND THAT ANY CUSTOMER MISSING HIS BALLS SHOULD SUSPECT LOCAL PERSONNEL OF REMOVING THESE NECESSARY FUNCTIONAL ITEMS.

P/N33F8462 -- DOMESTIC MOUSE BALLS

P/N33F8461 -- FOREIGN MOUSE BALLS



July 1989

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CACE CIS 8bit CO 10PM 9	10	WAUG Delphi CO 10PM 11	GAG GENie ST CO 10PM 12	CIS ST & GENie 8bit CO 10PM 13	14	CHAOS TAG 15
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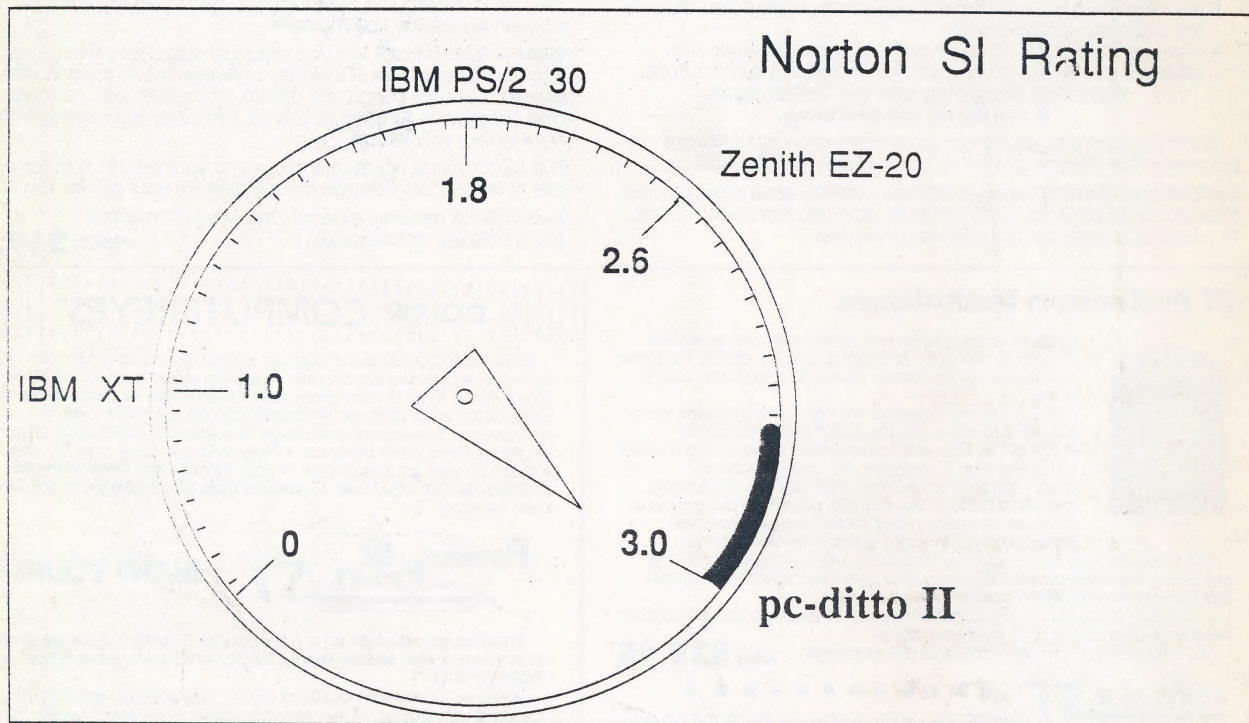
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